



Full wwPDB EM Validation Report ⓘ

Mar 9, 2026 – 05:11 AM UTC

PDB ID : 7U9T / pdb_00007u9t
EMDB ID : EMD-26408
Title : Structure of PKA phosphorylated human RyR2 in the closed state in the presence of Calmodulin
Authors : Miotto, M.C.; Marks, A.R.
Deposited on : 2022-03-11
Resolution : 2.68 Å(reported)
Based on initial model : 7U9Q

This is a Full wwPDB EM Validation Report for a publicly released PDB entry.

We welcome your comments at validation@mail.wwpdb.org

A user guide is available at

<https://www.wwpdb.org/validation/2017/EMValidationReportHelp>
with specific help available everywhere you see the ⓘ symbol.

The types of validation reports are described at

<http://www.wwpdb.org/validation/2017/FAQs#types>.

The following versions of software and data (see [references ⓘ](#)) were used in the production of this report:

EMDB validation analysis : 0.0.1.dev132
Mogul : 2022.3.0, CSD as543be (2022)
MolProbity : 4-5-2 with Phenix2.0
Buster-report : wwPDB partial adaption of 1.1.7 (2018)
Percentile statistics : 20250101.v01 (using entries in the PDB archive January 1st 2025)
EM percentile statistics : 202505.v01 (Using data in the EMDB archive up until May 2025)
MapQ : 1.9.13
Ideal geometry (proteins) : Engh & Huber (2001)
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP) : 2.49

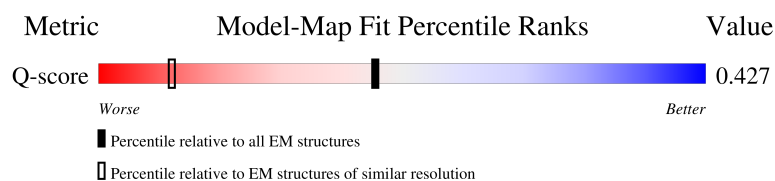
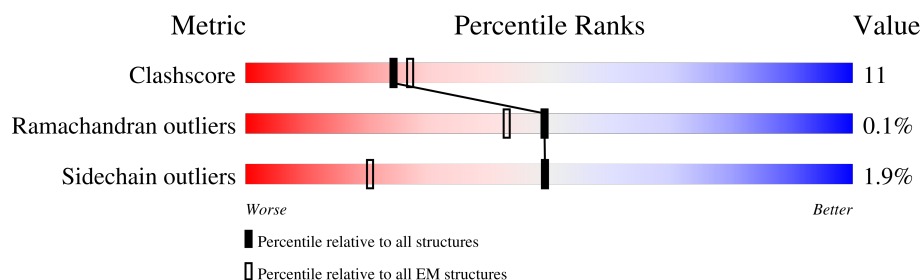
1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

ELECTRON MICROSCOPY

The reported resolution of this entry is 2.68 Å.

Percentile scores (ranging between 0-100) for global validation metrics of the entry are shown in the following graphic. The table shows the number of entries on which the scores are based.



Metric	Whole archive (#Entries)	EM structures (#Entries)	Similar EM resolution (#Entries, resolution range(Å))
Clashscore	229148	23984	-
Ramachandran outliers	224038	23583	-
Sidechain outliers	223484	23102	-
Q-score	-	25397	9255 (2.18 - 3.18)

The table below summarises the geometric issues observed across the polymeric chains and their fit to the map. The red, orange, yellow and green segments of the bar indicate the fraction of residues that contain outliers for ≥ 3 , 2, 1 and 0 types of geometric quality criteria respectively. A grey segment represents the fraction of residues that are not modelled. The numeric value for each fraction is indicated below the corresponding segment, with a dot representing fractions $\leq 5\%$. The upper red bar (where present) indicates the fraction of residues that have poor fit to the EM map (all-atom inclusion $< 40\%$). The numeric value is given above the bar.

Mol	Chain	Length	Quality of chain
1	E	108	
1	F	108	
1	G	108	
1	H	108	

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Mol	Chain	Length	Quality of chain
2	A	4967	11% 65% 19% • 15%
2	B	4967	11% 65% 19% • 15%
2	C	4967	11% 65% 19% • 15%
2	D	4967	11% 65% 19% • 15%
3	I	149	57% 64% 28% • • 5%
3	J	149	58% 64% 27% • • 5%
3	K	149	54% 65% 26% • • 5%
3	L	149	56% 64% 27% • • 5%

2 Entry composition

There are 5 unique types of molecules in this entry. The entry contains 143236 atoms, of which 0 are hydrogens and 0 are deuteriums.

In the tables below, the AltConf column contains the number of residues with at least one atom in alternate conformation and the Trace column contains the number of residues modelled with at most 2 atoms.

- Molecule 1 is a protein called Peptidyl-prolyl cis-trans isomerase FKBP1B.

Mol	Chain	Residues	Atoms					AltConf	Trace
1	H	107	Total	C	N	O	S	0	0
			818	516	144	154	4		
1	E	107	Total	C	N	O	S	0	0
			818	516	144	154	4		
1	F	107	Total	C	N	O	S	0	0
			818	516	144	154	4		
1	G	107	Total	C	N	O	S	0	0
			818	516	144	154	4		

- Molecule 2 is a protein called Ryanodine receptor 2.

Mol	Chain	Residues	Atoms					AltConf	Trace
2	A	4229	Total	C	N	O	S	2	0
			33816	21542	5758	6286	230		
2	D	4229	Total	C	N	O	S	2	0
			33816	21542	5758	6286	230		
2	B	4229	Total	C	N	O	S	2	0
			33816	21542	5758	6286	230		
2	C	4229	Total	C	N	O	S	2	0
			33816	21542	5758	6286	230		

- Molecule 3 is a protein called Calmodulin-1.

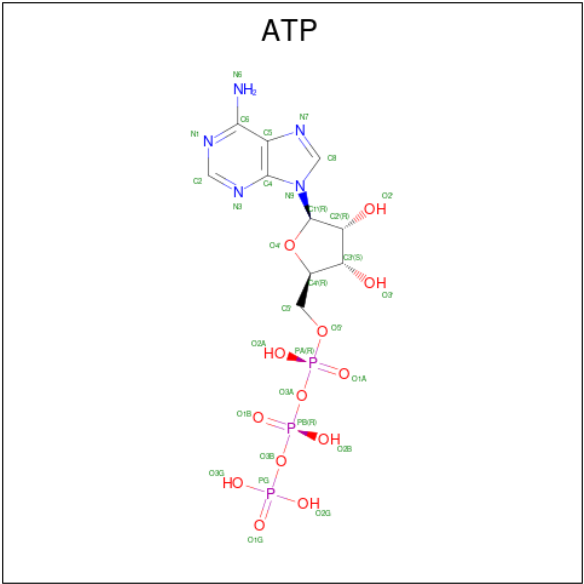
Mol	Chain	Residues	Atoms					AltConf	Trace
3	I	142	Total	C	N	O	S	0	0
			1112	687	181	234	10		
3	J	142	Total	C	N	O	S	0	0
			1112	687	181	234	10		
3	K	142	Total	C	N	O	S	0	0
			1112	687	181	234	10		
3	L	142	Total	C	N	O	S	0	0
			1112	687	181	234	10		

- Molecule 4 is ZINC ION (CCD ID: ZN) (formula: Zn) (labeled as "Ligand of Interest" by

depositor).

Mol	Chain	Residues	Atoms		AltConf
4	A	1	Total	Zn	0
			1	1	
4	D	1	Total	Zn	0
			1	1	
4	B	1	Total	Zn	0
			1	1	
4	C	1	Total	Zn	0
			1	1	

- Molecule 5 is ADENOSINE-5'-TRIPHOSPHATE (CCD ID: ATP) (formula: C₁₀H₁₆N₅O₁₃P₃) (labeled as "Ligand of Interest" by depositor).



Mol	Chain	Residues	Atoms					AltConf
5	A	1	Total	C	N	O	P	0
			31	10	5	13	3	
5	A	1	Total	C	N	O	P	0
			31	10	5	13	3	
5	D	1	Total	C	N	O	P	0
			31	10	5	13	3	
5	D	1	Total	C	N	O	P	0
			31	10	5	13	3	
5	B	1	Total	C	N	O	P	0
			31	10	5	13	3	
5	B	1	Total	C	N	O	P	0
			31	10	5	13	3	

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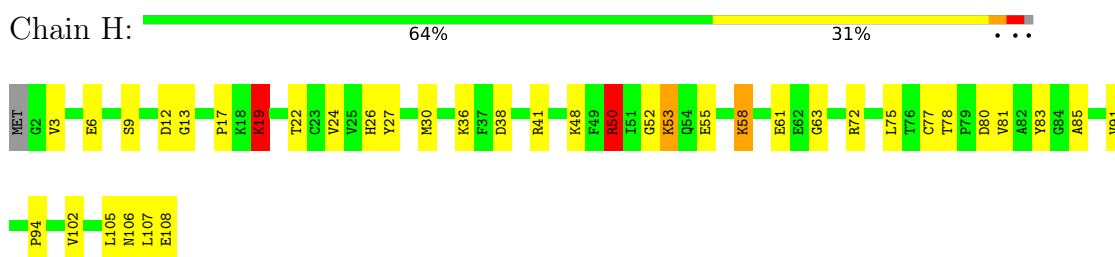
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Mol	Chain	Residues	Atoms					AltConf
5	C	1	Total	C	N	O	P	0
			31	10	5	13	3	
5	C	1	Total	C	N	O	P	0
			31	10	5	13	3	

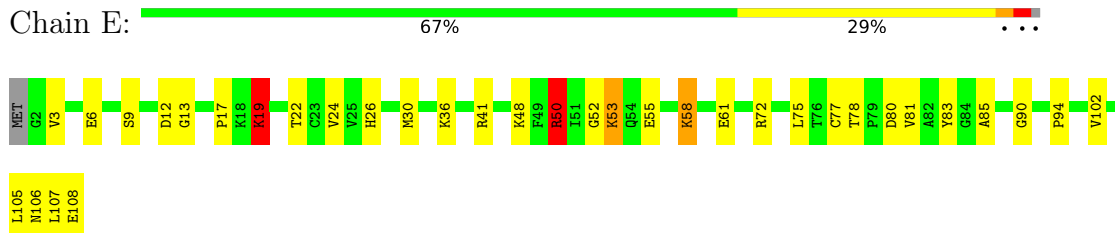
3 Residue-property plots [i](#)

These plots are drawn for all protein, RNA, DNA and oligosaccharide chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and atom inclusion in map density. Residues are color-coded according to the number of geometric quality criteria for which they contain at least one outlier: green = 0, yellow = 1, orange = 2 and red = 3 or more. A red diamond above a residue indicates a poor fit to the EM map for this residue (all-atom inclusion < 40%). Stretches of 2 or more consecutive residues without any outlier are shown as a green connector. Residues present in the sample, but not in the model, are shown in grey.

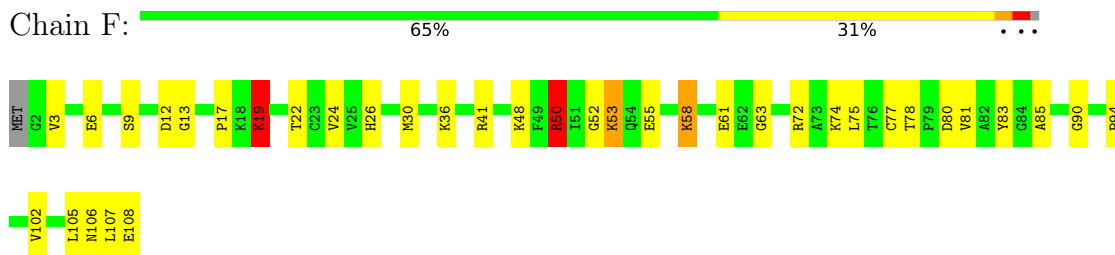
- Molecule 1: Peptidyl-prolyl cis-trans isomerase FKBP1B



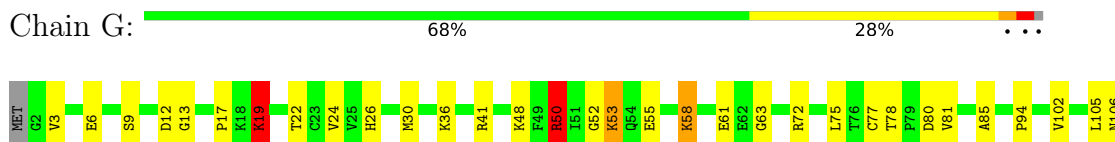
- Molecule 1: Peptidyl-prolyl cis-trans isomerase FKBP1B



- Molecule 1: Peptidyl-prolyl cis-trans isomerase FKBP1B

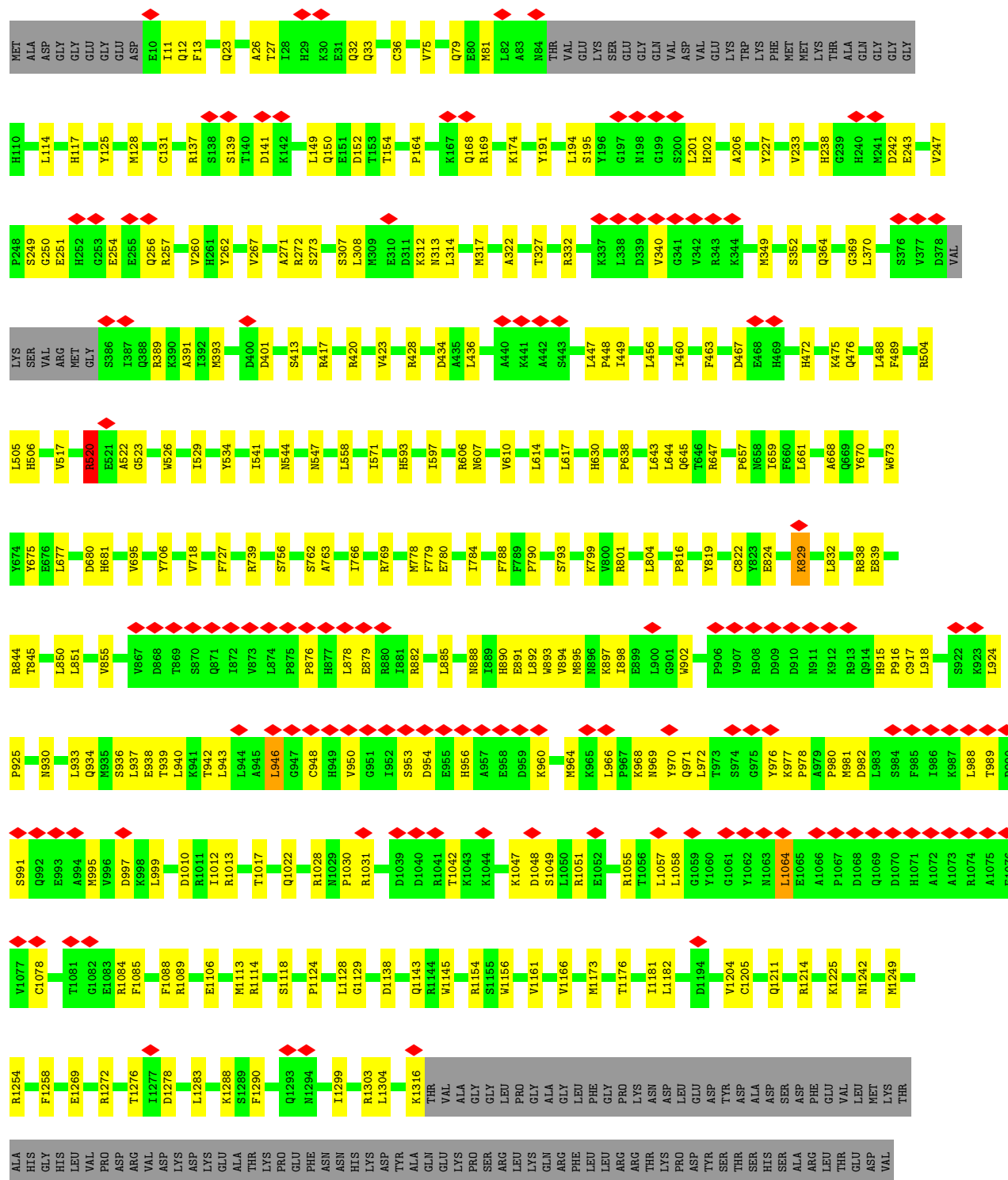


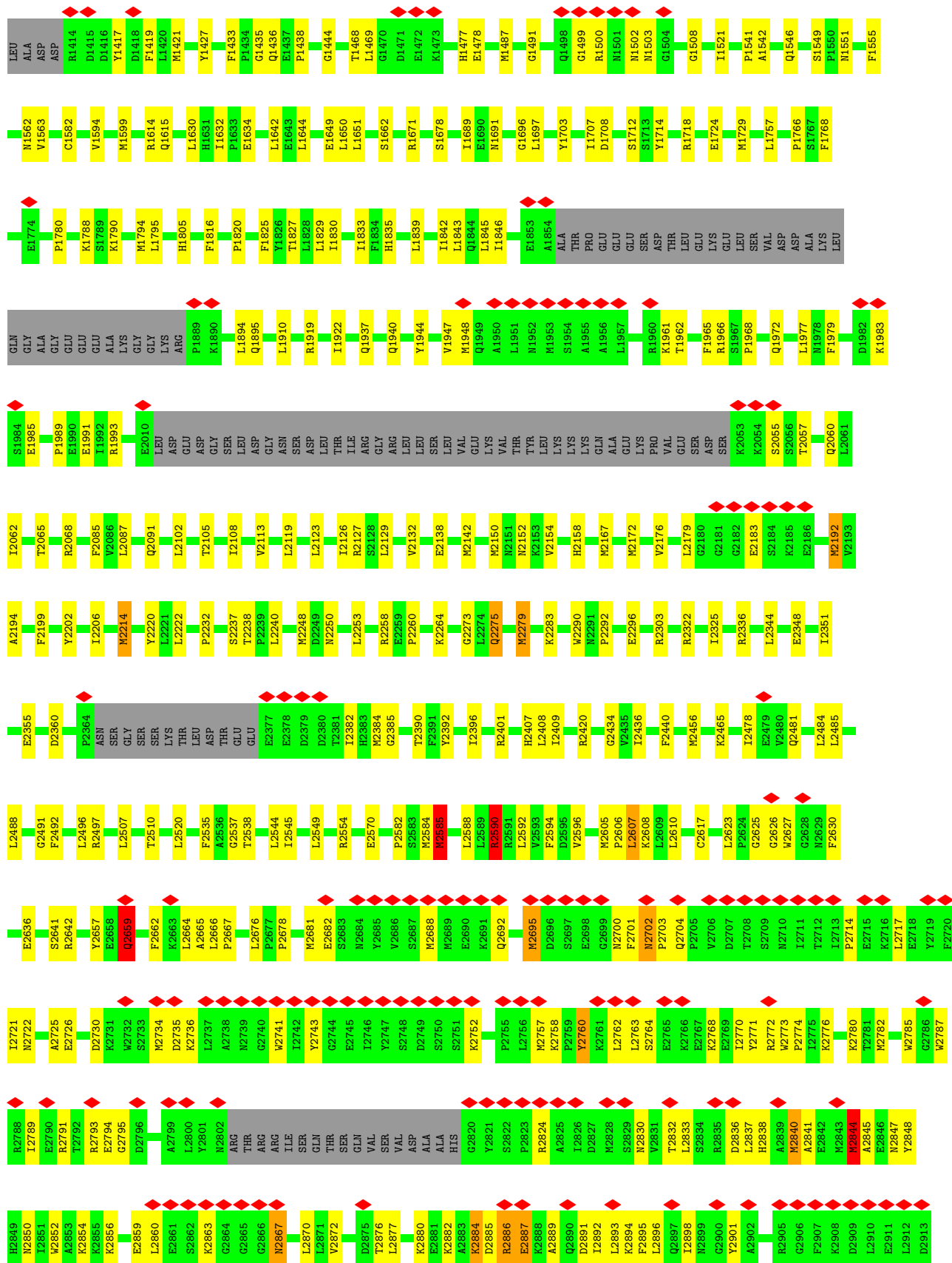
- Molecule 1: Peptidyl-prolyl cis-trans isomerase FKBP1B

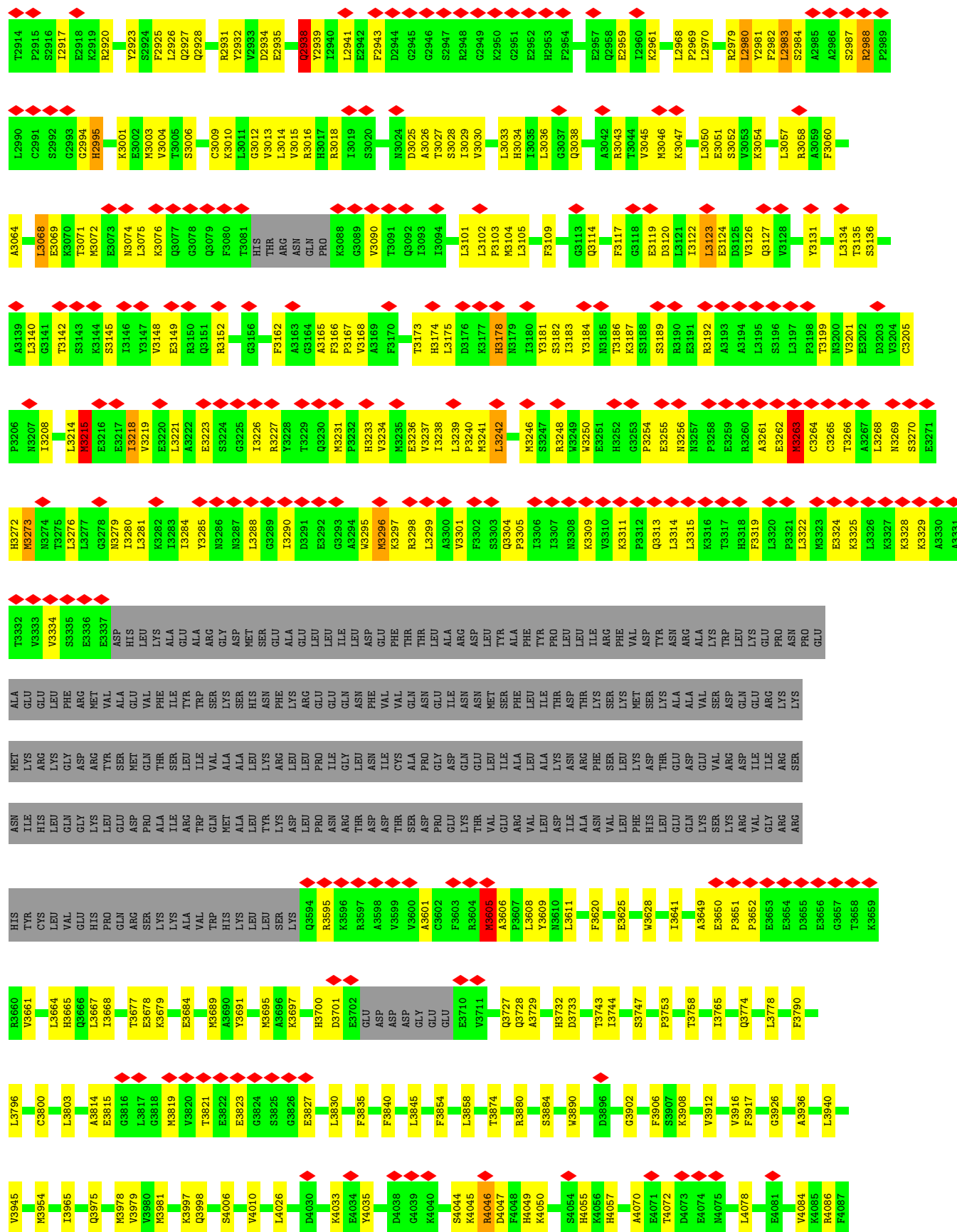


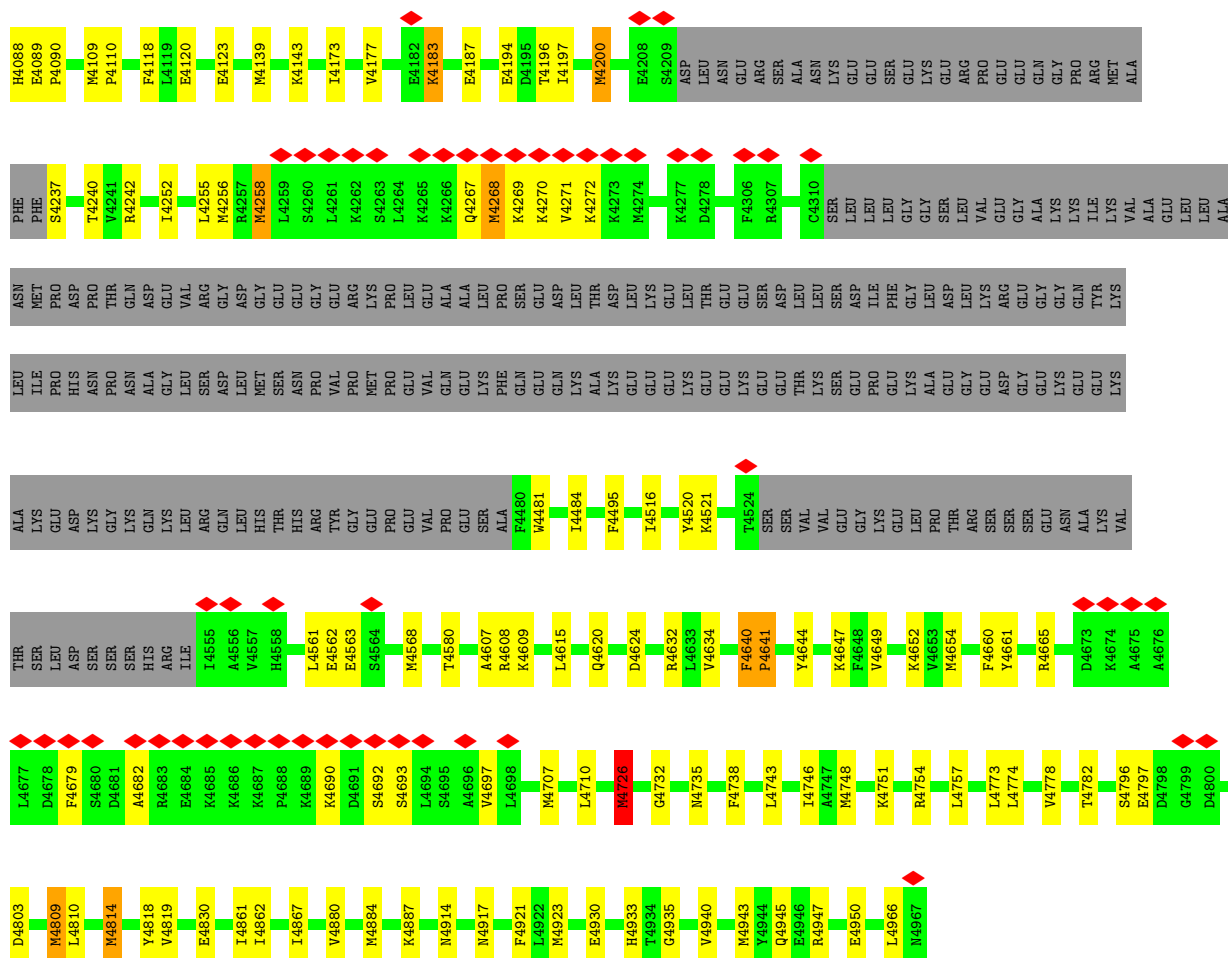
L107
E108

• Molecule 2: Ryanodine receptor 2

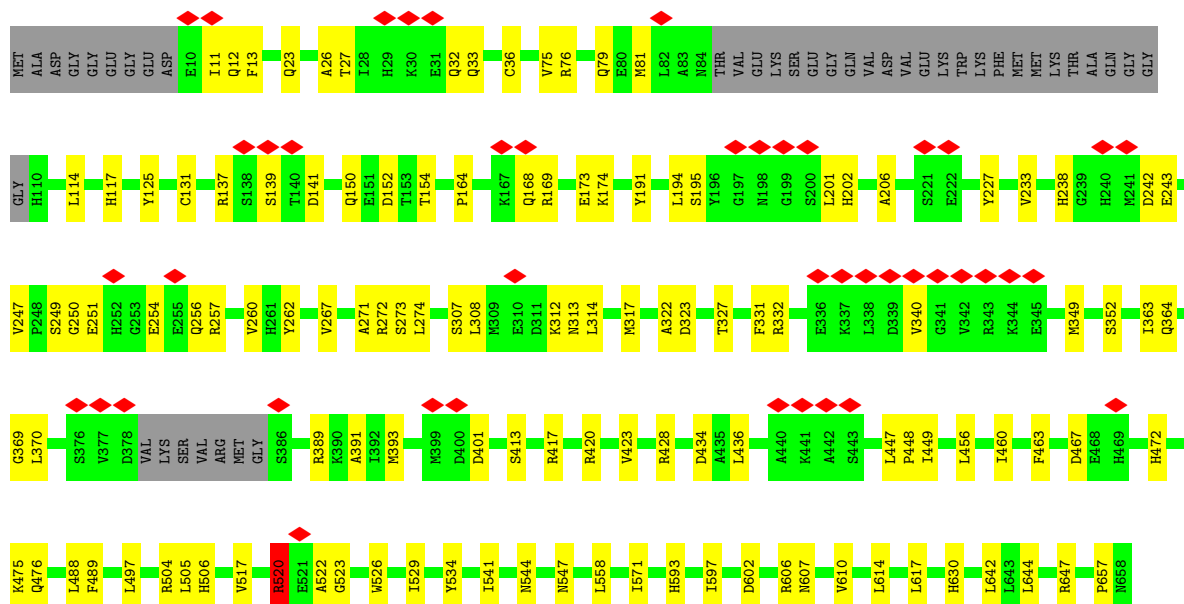
Chain A:  11% 65% 19% 15%







• Molecule 2: Ryanodine receptor 2



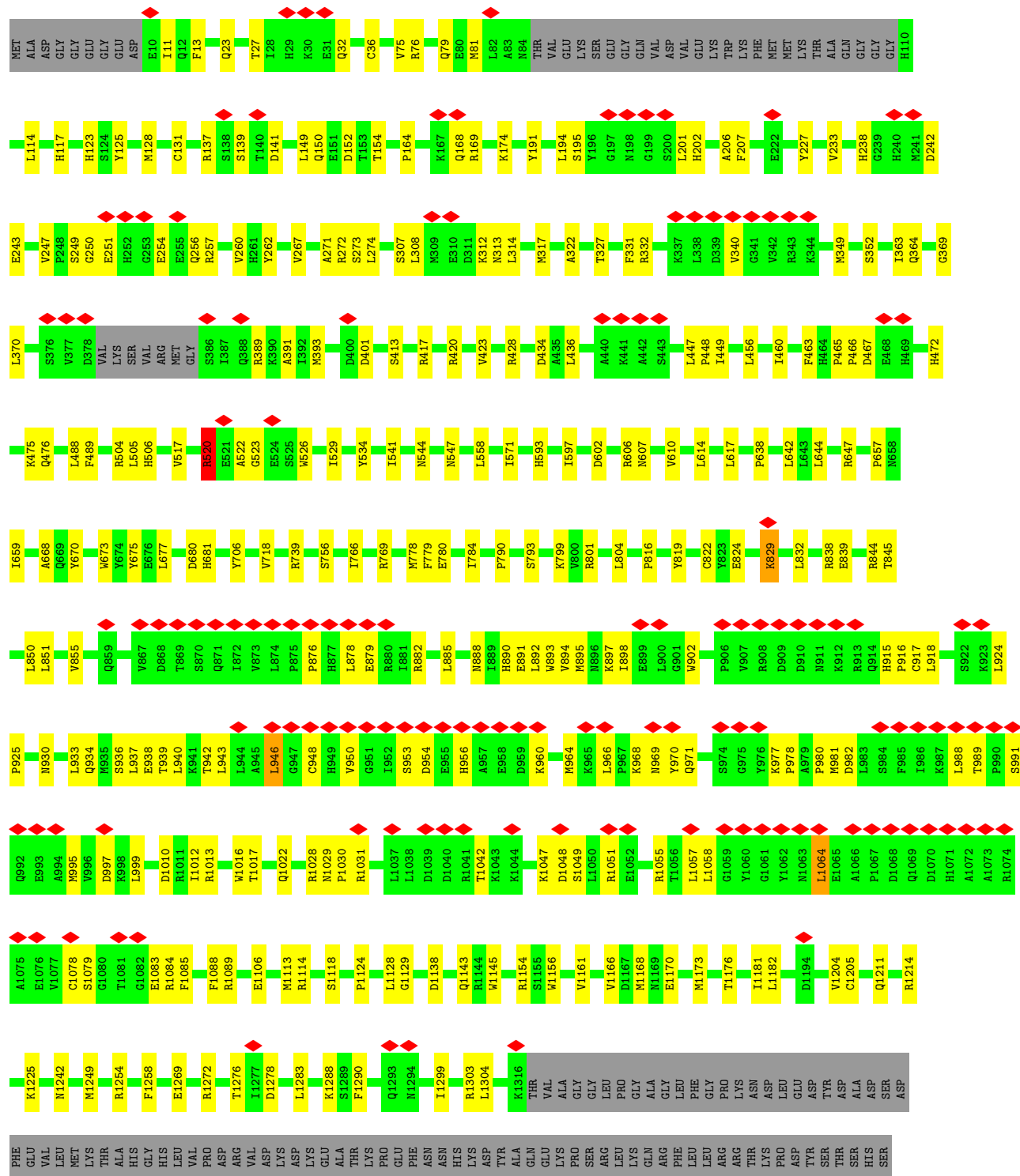


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R3260	A3261	E3262	M3263	C3264	C3265	T3266	A3267	L3268	N3269	S3270	E3271	H3272	M3273	N3274	T3275	L3276	L3277	G3278	N3279	I3280	L3281	K3282	I3283	L3284	Y3285	N3286	N3287	L3288	G3289	I3290	D3291	E3292	G3293	A3294	W3295	M3296	K3297	R3298	L3299	A3300	V3301	F3302	S3303	Q3304	P3305	I3306	L3307	N3308	K3309	V3310	K3311	P3312	Q3313	L3314	K3315	K3316	L3317	H3318	F3319	
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E2296	R2303	L2607	R2322	L2325	R2336	G2337	L2344	E2348	I2351	E2355	D2360	P2364	ASN	SER	GLY	SER	SER	LYS	THR	LEU	ASP	THR	GLU	GLU	E2377	E2378	D2379	D2380	L2381	L2382	H2383	N2384	G2385	T2390	F2391	Y2392	L2396	R2401	H2407	L2408	I2409	R2420	G2434	V2435																
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K2961	L2968	P2969	L2970	R2979	L2980	Y2981	F2982	L2983	S2984	A2985	A2986	S2987	P2988	L2990	C2991	S2992	G2993	G2994	H2995	K3001	E3002	M3003	V3004	T3005	S3006	C3009	K3010	L3011	G3012	V3013	L3014	V3015	K3016	H3017	R3018	L3019	S3020	T3024	D3025	A3026	T3027	S3028	L3029	V3030	L3033	H3034	L3035	L3036	G3037	Q3038	T3039									
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R3260	A3261	E3262	M3263	C3264	C3265	T3266	A3267	L3268	N3269	S3270	E3271	H3272	M3273	N3274	T3275	L3276	L3277	G3278	N3279	I3280	L3281	K3282	I3283	L3284	Y3285	N3286	N3287	L3288	G3289	I3290	D3291	E3292	G3293	A3294	W3295	M3296	K3297	R3298	L3299	A3300	V3301	F3302	S3303	Q3304	P3305	I3306	L3307	N3308	K3309	V3310	K3311	P3312	Q3313	L3314	K3315	K3316	L3317	H3318	F3319	
L3320	P3321	L3322	M3323	E3324	E3325	L3326	K3327	K3328	K3329	A3330	A3331	L3332	L3333	L3334	E3335	E3336	E3337	ASP	HIS	LEU	LYS	ALA	GLU	ALA	ALA	ARG	GLY	ASP	MET	SER	GLU	ALA	LEU	LEU	TLE	ASP	PHE	THR	THR	LEU	LEU	ARG	ASP	LEU	TYR	ALA	PHE	TYR	PRO	LEU	LEU	LEU	TLE	ARG	ARG	PHE	VAL	ASP	TYR	





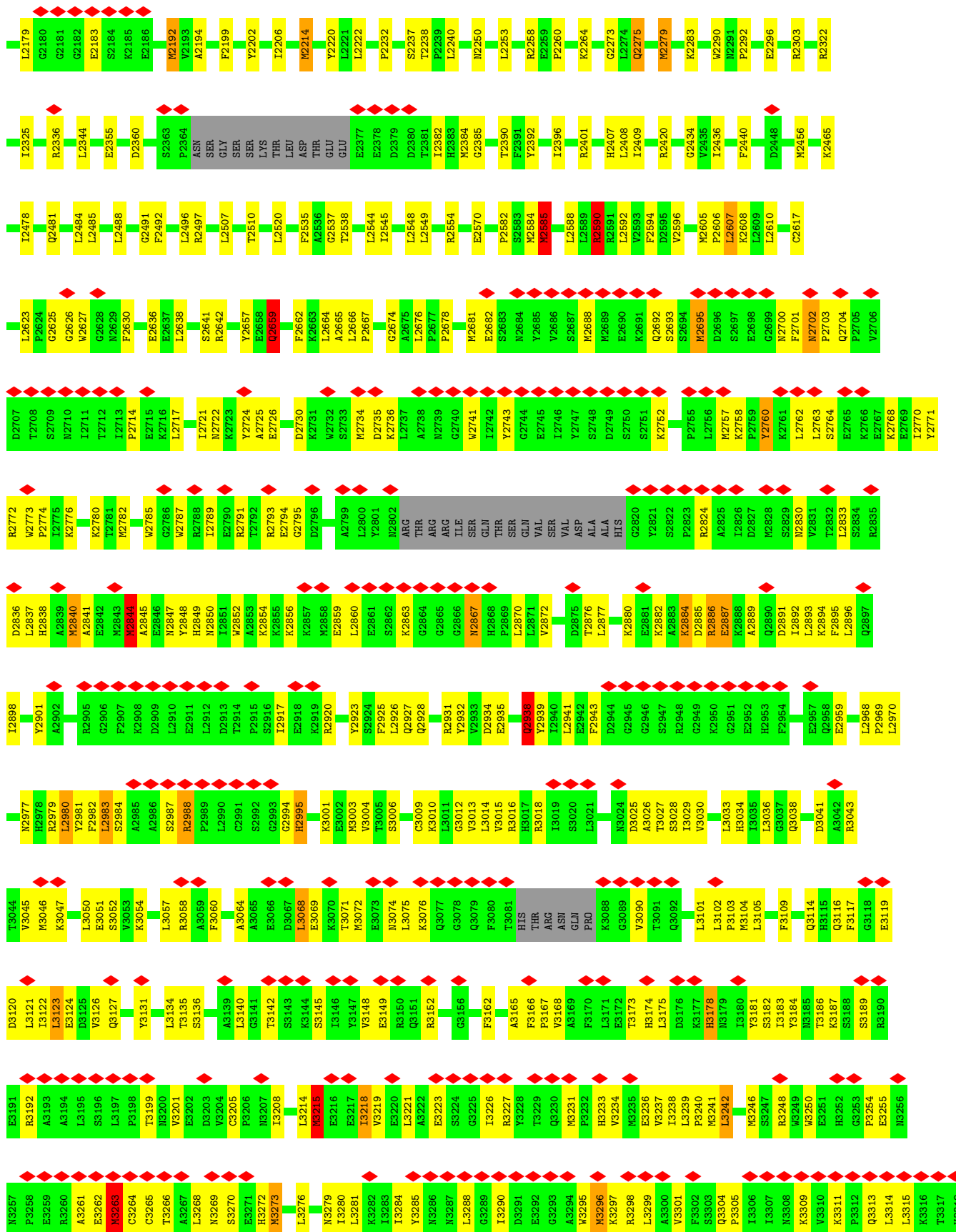
• Molecule 2: Ryanodine receptor 2







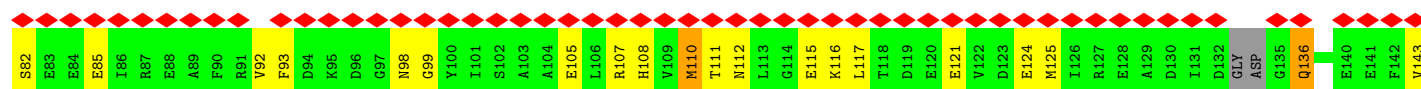




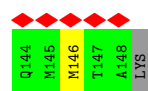
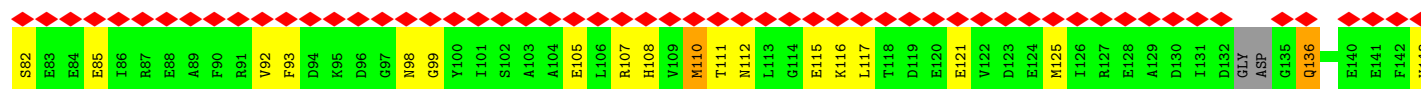
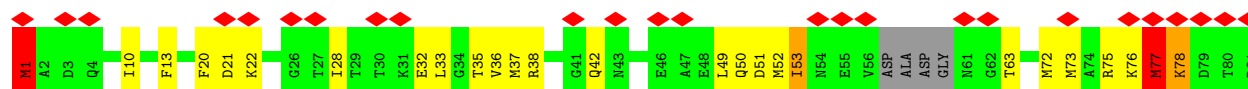




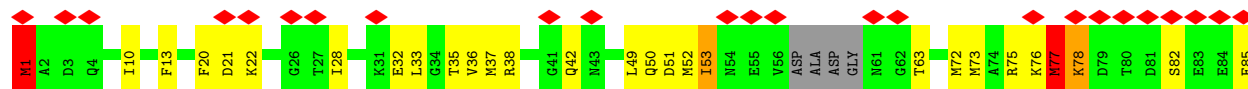
• Molecule 3: Calmodulin-1



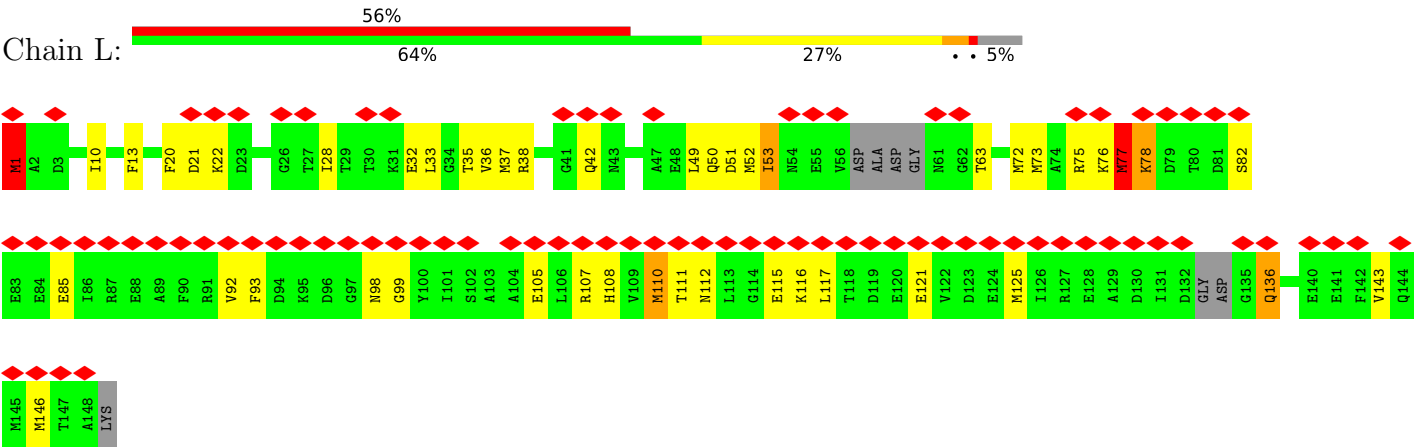
• Molecule 3: Calmodulin-1



• Molecule 3: Calmodulin-1



• Molecule 3: Calmodulin-1



4 Experimental information

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, Not provided	
Number of particles used	38187	Depositor
Resolution determination method	FSC 0.143 CUT-OFF	Depositor
CTF correction method	PHASE FLIPPING AND AMPLITUDE CORRECTION	Depositor
Microscope	FEI TITAN KRIOS	Depositor
Voltage (kV)	300	Depositor
Electron dose ($e^-/\text{\AA}^2$)	58	Depositor
Minimum defocus (nm)	400	Depositor
Maximum defocus (nm)	1200	Depositor
Magnification	Not provided	
Image detector	GATAN K3 BIOQUANTUM (6k x 4k)	Depositor
Maximum map value	0.728	Depositor
Minimum map value	-0.012	Depositor
Average map value	0.015	Depositor
Map value standard deviation	0.035	Depositor
Recommended contour level	0.14	Depositor
Map size (Å)	425.984, 425.984, 425.984	wwPDB
Map dimensions	512, 512, 512	wwPDB
Map angles (°)	90.0, 90.0, 90.0	wwPDB
Pixel spacing (Å)	0.832, 0.832, 0.832	Depositor

5 Model quality

5.1 Standard geometry

Bond lengths and bond angles in the following residue types are not validated in this section: ZN, ATP

The Z score for a bond length (or angle) is the number of standard deviations the observed value is removed from the expected value. A bond length (or angle) with $|Z| > 5$ is considered an outlier worth inspection. RMSZ is the root-mean-square of all Z scores of the bond lengths (or angles).

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	$\# Z > 5$	RMSZ	$\# Z > 5$
1	E	0.22	0/834	0.57	2/1123 (0.2%)
1	F	0.22	0/834	0.57	2/1123 (0.2%)
1	G	0.22	0/834	0.57	2/1123 (0.2%)
1	H	0.22	0/834	0.57	2/1123 (0.2%)
2	A	0.16	0/34556	0.43	16/46672 (0.0%)
2	B	0.16	0/34556	0.43	16/46672 (0.0%)
2	C	0.16	0/34556	0.43	16/46672 (0.0%)
2	D	0.16	0/34556	0.43	16/46672 (0.0%)
3	I	0.21	0/1122	0.67	4/1504 (0.3%)
3	J	0.21	0/1122	0.67	4/1504 (0.3%)
3	K	0.21	0/1122	0.67	4/1504 (0.3%)
3	L	0.20	0/1122	0.67	4/1504 (0.3%)
All	All	0.16	0/146048	0.44	88/197196 (0.0%)

Chiral center outliers are detected by calculating the chiral volume of a chiral center and verifying if the center is modelled as a planar moiety or with the opposite hand. A planarity outlier is detected by checking planarity of atoms in a peptide group, atoms in a mainchain group or atoms of a sidechain that are expected to be planar.

Mol	Chain	#Chirality outliers	#Planarity outliers
2	A	0	4
2	B	0	4
2	C	0	4
2	D	0	4
All	All	0	16

There are no bond length outliers.

All (88) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	D	2659	GLN	CA-CB-CG	9.56	133.23	114.10
2	B	2659	GLN	CA-CB-CG	9.55	133.21	114.10
2	A	2659	GLN	CA-CB-CG	9.54	133.19	114.10
2	C	2659	GLN	CA-CB-CG	9.54	133.18	114.10
2	A	2938	GLN	CA-CB-CG	9.36	132.81	114.10
2	D	2938	GLN	CA-CB-CG	9.34	132.77	114.10
2	C	2938	GLN	CA-CB-CG	9.32	132.74	114.10
2	B	2938	GLN	CA-CB-CG	9.31	132.72	114.10
2	C	2840	MET	CB-CG-SD	8.74	138.93	112.70
2	D	2840	MET	CB-CG-SD	8.74	138.92	112.70
2	B	2840	MET	CB-CG-SD	8.73	138.90	112.70
2	A	2840	MET	CB-CG-SD	8.73	138.88	112.70
1	G	50	ARG	CG-CD-NE	7.18	127.80	112.00
1	F	50	ARG	CG-CD-NE	7.17	127.77	112.00
1	E	50	ARG	CG-CD-NE	7.16	127.75	112.00
1	H	50	ARG	CG-CD-NE	7.14	127.70	112.00
2	B	2938	GLN	N-CA-CB	6.80	120.23	110.16
2	C	2938	GLN	N-CA-CB	6.77	120.19	110.16
2	D	2938	GLN	N-CA-CB	6.75	120.16	110.16
2	A	2938	GLN	N-CA-CB	6.74	120.14	110.16
2	A	2659	GLN	CB-CG-CD	6.68	123.96	112.60
2	B	2659	GLN	CB-CG-CD	6.68	123.95	112.60
2	C	2659	GLN	CB-CG-CD	6.68	123.95	112.60
2	D	2659	GLN	CB-CG-CD	6.66	123.93	112.60
2	C	2585	MET	CB-CG-SD	6.66	132.69	112.70
2	A	2585	MET	CB-CG-SD	6.66	132.68	112.70
2	B	2585	MET	CB-CG-SD	6.65	132.66	112.70
2	D	2585	MET	CB-CG-SD	6.65	132.65	112.70
2	C	2590	ARG	CB-CG-CD	6.63	126.55	111.30
2	B	2590	ARG	CB-CG-CD	6.63	126.54	111.30
2	D	2590	ARG	CB-CG-CD	6.62	126.53	111.30
2	A	2590	ARG	CB-CG-CD	6.61	126.51	111.30
2	B	2844	MET	CB-CG-SD	6.59	132.48	112.70
2	A	2844	MET	CB-CG-SD	6.59	132.47	112.70
3	I	1	MET	CB-CG-SD	6.58	132.43	112.70
2	D	2844	MET	CB-CG-SD	6.58	132.43	112.70
3	L	1	MET	CB-CG-SD	6.57	132.41	112.70
3	K	1	MET	CB-CG-SD	6.57	132.41	112.70
2	C	2844	MET	CB-CG-SD	6.57	132.40	112.70
3	J	1	MET	CB-CG-SD	6.57	132.40	112.70
2	C	2844	MET	CA-CB-CG	6.28	126.65	114.10
2	A	2844	MET	CA-CB-CG	6.26	126.62	114.10
2	D	2844	MET	CA-CB-CG	6.26	126.61	114.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2844	MET	CA-CB-CG	6.24	126.58	114.10
3	K	77	MET	CA-CB-CG	6.21	126.51	114.10
3	I	77	MET	CA-CB-CG	6.20	126.50	114.10
3	J	77	MET	CA-CB-CG	6.20	126.50	114.10
3	L	77	MET	CA-CB-CG	6.19	126.47	114.10
2	D	2585	MET	CA-CB-CG	5.77	125.63	114.10
2	B	2585	MET	CA-CB-CG	5.75	125.60	114.10
2	A	2585	MET	CA-CB-CG	5.75	125.60	114.10
3	L	136	GLN	CA-CB-CG	5.75	125.60	114.10
3	K	136	GLN	CA-CB-CG	5.74	125.58	114.10
2	C	2585	MET	CA-CB-CG	5.74	125.57	114.10
3	I	136	GLN	CA-CB-CG	5.73	125.57	114.10
3	J	136	GLN	CA-CB-CG	5.72	125.55	114.10
3	I	77	MET	CB-CG-SD	5.71	129.81	112.70
3	L	77	MET	CB-CG-SD	5.70	129.81	112.70
3	J	77	MET	CB-CG-SD	5.70	129.80	112.70
3	K	77	MET	CB-CG-SD	5.69	129.76	112.70
2	D	3263	MET	CB-CG-SD	5.67	129.69	112.70
2	A	3263	MET	CB-CG-SD	5.66	129.68	112.70
2	B	3263	MET	CB-CG-SD	5.65	129.66	112.70
2	C	3263	MET	CB-CG-SD	5.65	129.65	112.70
2	C	4726	MET	CB-CG-SD	5.40	128.89	112.70
2	A	4726	MET	CB-CG-SD	5.39	128.88	112.70
2	B	4726	MET	CB-CG-SD	5.39	128.88	112.70
2	D	4726	MET	CB-CG-SD	5.39	128.87	112.70
2	C	3215	MET	CB-CG-SD	5.34	128.72	112.70
2	A	3605	MET	CB-CG-SD	5.34	128.72	112.70
2	C	3605	MET	CB-CG-SD	5.34	128.72	112.70
2	D	3605	MET	CB-CG-SD	5.34	128.71	112.70
2	D	3215	MET	CB-CG-SD	5.33	128.69	112.70
2	B	3605	MET	CB-CG-SD	5.33	128.70	112.70
2	A	3215	MET	CB-CG-SD	5.33	128.68	112.70
2	B	3215	MET	CB-CG-SD	5.32	128.66	112.70
1	E	19	LYS	CB-CG-CD	5.21	123.29	111.30
1	G	19	LYS	CB-CG-CD	5.21	123.28	111.30
1	F	19	LYS	CB-CG-CD	5.20	123.25	111.30
1	H	19	LYS	CB-CG-CD	5.20	123.25	111.30
2	C	3263	MET	CA-CB-CG	5.06	124.21	114.10
2	C	520	ARG	CB-CG-CD	5.05	122.92	111.30
2	D	520	ARG	CB-CG-CD	5.05	122.91	111.30
2	A	3263	MET	CA-CB-CG	5.04	124.18	114.10
2	B	3263	MET	CA-CB-CG	5.04	124.18	114.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	A	520	ARG	CB-CG-CD	5.04	122.89	111.30
2	B	520	ARG	CB-CG-CD	5.03	122.88	111.30
2	D	3263	MET	CA-CB-CG	5.03	124.16	114.10

There are no chirality outliers.

All (16) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
2	A	2886	ARG	Sidechain
2	A	2995	HIS	Peptide
2	A	4640	PHE	Peptide
2	A	520	ARG	Sidechain
2	B	2886	ARG	Sidechain
2	B	2995	HIS	Peptide
2	B	4640	PHE	Peptide
2	B	520	ARG	Sidechain
2	C	2886	ARG	Sidechain
2	C	2995	HIS	Peptide
2	C	4640	PHE	Peptide
2	C	520	ARG	Sidechain
2	D	2886	ARG	Sidechain
2	D	2995	HIS	Peptide
2	D	4640	PHE	Peptide
2	D	520	ARG	Sidechain

5.2 Too-close contacts [i](#)

In the following table, the Non-H and H(model) columns list the number of non-hydrogen atoms and hydrogen atoms in the chain respectively. The H(added) column lists the number of hydrogen atoms added and optimized by MolProbity. The Clashes column lists the number of clashes within the asymmetric unit, whereas Symm-Clashes lists symmetry-related clashes.

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	E	818	0	821	26	0
1	F	818	0	821	29	0
1	G	818	0	821	25	0
1	H	818	0	821	28	0
2	A	33816	0	33507	719	0
2	B	33816	0	33507	709	0
2	C	33816	0	33507	723	0
2	D	33816	0	33507	733	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
3	I	1112	0	1053	34	0
3	J	1112	0	1053	31	0
3	K	1112	0	1053	30	0
3	L	1112	0	1053	33	0
4	A	1	0	0	0	0
4	B	1	0	0	0	0
4	C	1	0	0	0	0
4	D	1	0	0	0	0
5	A	62	0	24	0	0
5	B	62	0	24	0	0
5	C	62	0	24	0	0
5	D	62	0	24	0	0
All	All	143236	0	141620	3051	0

The all-atom clashscore is defined as the number of clashes found per 1000 atoms (including hydrogen atoms). The all-atom clashscore for this structure is 11.

All (3051) close contacts within the same asymmetric unit are listed below, sorted by their clash magnitude.

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:2841:ALA:HA	2:A:2844:MET:HG3	1.35	1.09
2:B:2841:ALA:HA	2:B:2844:MET:HG3	1.35	1.08
2:C:2841:ALA:HA	2:C:2844:MET:HG3	1.34	1.06
2:D:2841:ALA:HA	2:D:2844:MET:HG3	1.35	1.04
2:B:3250:TRP:HE1	2:B:3273:MET:HE3	1.29	0.98
2:C:3250:TRP:HE1	2:C:3273:MET:HE3	1.29	0.96
2:D:3250:TRP:HE1	2:D:3273:MET:HE3	1.29	0.95
2:A:3250:TRP:HE1	2:A:3273:MET:HE3	1.29	0.94
1:F:50:ARG:HH11	1:F:50:ARG:HB2	1.34	0.93
1:H:50:ARG:HH11	1:H:50:ARG:HB2	1.35	0.91
1:G:50:ARG:HB2	1:G:50:ARG:HH11	1.34	0.89
1:E:50:ARG:HB2	1:E:50:ARG:HH11	1.34	0.89
3:L:75:ARG:O	3:L:78:LYS:NZ	2.10	0.85
3:K:75:ARG:O	3:K:78:LYS:NZ	2.10	0.84
3:J:75:ARG:O	3:J:78:LYS:NZ	2.10	0.84
3:I:75:ARG:O	3:I:78:LYS:NZ	2.10	0.83
2:C:1703:TYR:HD2	2:C:1820:PRO:HB2	1.44	0.83
2:C:2129:LEU:HD12	2:C:2142:MET:HE2	1.61	0.82
2:B:2129:LEU:HD12	2:B:2142:MET:HE2	1.61	0.82
2:D:1703:TYR:HD2	2:D:1820:PRO:HB2	1.44	0.82
2:C:3264:CYS:SG	2:C:3265:CYS:N	2.53	0.81

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:1703:TYR:HD2	2:B:1820:PRO:HB2	1.44	0.81
2:A:2129:LEU:HD12	2:A:2142:MET:HE2	1.61	0.81
2:D:3264:CYS:SG	2:D:3265:CYS:N	2.53	0.81
2:B:3264:CYS:SG	2:B:3265:CYS:N	2.53	0.80
2:D:2129:LEU:HD12	2:D:2142:MET:HE2	1.61	0.80
3:I:52:MET:SD	3:I:76:LYS:NZ	2.55	0.80
2:A:1703:TYR:HD2	2:A:1820:PRO:HB2	1.44	0.80
3:J:52:MET:SD	3:J:76:LYS:NZ	2.55	0.80
3:K:52:MET:SD	3:K:76:LYS:NZ	2.55	0.80
2:C:3131:TYR:HE1	2:C:3166:PHE:HZ	1.29	0.80
2:D:2607:LEU:HD21	2:D:2665:ALA:HA	1.64	0.79
2:B:2590:ARG:NH1	2:B:2636:GLU:OE2	2.15	0.79
2:B:2607:LEU:HD21	2:B:2665:ALA:HA	1.65	0.79
3:L:52:MET:SD	3:L:76:LYS:NZ	2.55	0.79
2:A:878:LEU:HD11	2:A:950:VAL:HG21	1.64	0.79
2:A:3264:CYS:SG	2:A:3265:CYS:N	2.53	0.79
2:B:878:LEU:HD11	2:B:950:VAL:HG21	1.64	0.79
2:C:2590:ARG:NH1	2:C:2636:GLU:OE2	2.15	0.79
2:A:2607:LEU:HD21	2:A:2665:ALA:HA	1.65	0.79
2:B:4183:LYS:HB2	2:B:4183:LYS:NZ	1.98	0.79
2:C:2592:LEU:HD11	2:C:2606:PRO:HB3	1.65	0.79
2:D:2590:ARG:NH1	2:D:2636:GLU:OE2	2.15	0.79
2:D:4183:LYS:HB2	2:D:4183:LYS:NZ	1.98	0.79
2:A:3131:TYR:HE1	2:A:3166:PHE:HZ	1.29	0.78
2:C:2607:LEU:HD21	2:C:2665:ALA:HA	1.65	0.78
2:C:4183:LYS:HB2	2:C:4183:LYS:NZ	1.98	0.78
2:C:878:LEU:HD11	2:C:950:VAL:HG21	1.64	0.78
2:C:2585:MET:HE3	2:C:2585:MET:H	1.49	0.78
2:A:936:SER:O	2:A:940:LEU:HD12	1.84	0.78
2:D:3131:TYR:HE1	2:D:3166:PHE:HZ	1.29	0.78
2:B:3131:TYR:HE1	2:B:3166:PHE:HZ	1.29	0.78
2:A:2590:ARG:NH1	2:A:2636:GLU:OE2	2.15	0.78
2:C:2887:GLU:O	2:C:2891:ASP:HB2	1.84	0.78
2:B:2592:LEU:HD11	2:B:2606:PRO:HB3	1.65	0.77
2:A:4183:LYS:HB2	2:A:4183:LYS:NZ	1.98	0.77
2:B:2887:GLU:O	2:B:2891:ASP:HB2	1.84	0.77
2:D:2592:LEU:HD11	2:D:2606:PRO:HB3	1.65	0.77
2:D:2623:LEU:HD22	2:D:2626:GLY:H	1.49	0.77
2:B:936:SER:O	2:B:940:LEU:HD12	1.84	0.77
2:C:2623:LEU:HD22	2:C:2626:GLY:H	1.49	0.77
2:A:891:GLU:HB3	2:A:895:MET:HE1	1.67	0.77

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:2585:MET:H	2:A:2585:MET:HE3	1.49	0.77
2:D:878:LEU:HD11	2:D:950:VAL:HG21	1.64	0.77
2:A:2623:LEU:HD22	2:A:2626:GLY:H	1.49	0.77
2:D:936:SER:O	2:D:940:LEU:HD12	1.84	0.77
2:B:3236:GLU:O	2:B:3298:ARG:NH2	2.18	0.77
2:C:891:GLU:HB3	2:C:895:MET:HE1	1.67	0.77
2:D:2887:GLU:O	2:D:2891:ASP:HB2	1.84	0.77
2:D:3250:TRP:NE1	2:D:3273:MET:HE3	2.00	0.77
2:C:981:MET:SD	2:C:1055:ARG:NH1	2.58	0.77
2:C:3236:GLU:O	2:C:3298:ARG:NH2	2.18	0.77
2:D:2585:MET:HE3	2:D:2585:MET:H	1.49	0.77
2:B:2585:MET:HE3	2:B:2585:MET:H	1.49	0.77
2:A:2887:GLU:O	2:A:2891:ASP:HB2	1.84	0.76
2:D:3236:GLU:O	2:D:3298:ARG:NH2	2.18	0.76
2:A:2860:LEU:HD23	2:A:2863:LYS:HZ1	1.49	0.76
2:B:891:GLU:HB3	2:B:895:MET:HE1	1.67	0.76
2:B:3261:ALA:O	2:B:3262:GLU:HG3	1.85	0.76
2:D:981:MET:SD	2:D:1055:ARG:NH1	2.58	0.76
2:A:2592:LEU:HD11	2:A:2606:PRO:HB3	1.65	0.76
2:A:3250:TRP:NE1	2:A:3273:MET:HE3	2.00	0.76
2:B:3250:TRP:NE1	2:B:3273:MET:HE3	2.00	0.76
2:A:3261:ALA:O	2:A:3262:GLU:HG3	1.85	0.76
2:D:3261:ALA:O	2:D:3262:GLU:HG3	1.85	0.76
2:B:981:MET:SD	2:B:1055:ARG:NH1	2.58	0.76
2:A:3236:GLU:O	2:A:3298:ARG:NH2	2.18	0.76
2:D:891:GLU:HB3	2:D:895:MET:HE1	1.67	0.76
2:C:3261:ALA:O	2:C:3262:GLU:HG3	1.85	0.76
2:A:981:MET:SD	2:A:1055:ARG:NH1	2.58	0.76
2:C:936:SER:O	2:C:940:LEU:HD12	1.84	0.76
2:D:4707:MET:HG3	2:C:4252:ILE:HG21	1.68	0.76
2:A:2142:MET:HB3	2:A:2192:MET:HE1	1.68	0.75
2:D:2142:MET:HB3	2:D:2192:MET:HE1	1.68	0.75
2:B:2142:MET:HB3	2:B:2192:MET:HE1	1.68	0.75
2:C:2142:MET:HB3	2:C:2192:MET:HE1	1.68	0.75
2:D:11:ILE:HG23	2:D:13:PHE:HE2	1.52	0.75
2:B:1795:LEU:HD23	2:B:1842:ILE:HD11	1.69	0.75
2:B:2623:LEU:HD22	2:B:2626:GLY:H	1.49	0.75
1:G:19:LYS:HA	1:G:19:LYS:HE3	1.68	0.75
2:A:1795:LEU:HD23	2:A:1842:ILE:HD11	1.69	0.75
2:D:1795:LEU:HD23	2:D:1842:ILE:HD11	1.69	0.75
1:E:19:LYS:HA	1:E:19:LYS:HE3	1.68	0.75

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:11:ILE:HG23	2:C:13:PHE:HE2	1.52	0.74
1:H:19:LYS:HA	1:H:19:LYS:HE3	1.68	0.74
2:D:2860:LEU:HD23	2:D:2863:LYS:HZ1	1.52	0.74
2:C:1795:LEU:HD23	2:C:1842:ILE:HD11	1.69	0.74
2:C:3250:TRP:NE1	2:C:3273:MET:HE3	2.00	0.74
2:A:3926:GLY:HA2	2:A:4935:GLY:HA3	1.69	0.74
2:C:3214:LEU:O	2:C:3218:ILE:HG22	1.88	0.74
2:A:4640:PHE:CD2	2:A:4641:PRO:HD3	2.23	0.74
1:F:19:LYS:HA	1:F:19:LYS:HE3	1.68	0.74
2:C:3605:MET:HE3	2:C:3605:MET:C	2.13	0.74
2:B:4640:PHE:CD2	2:B:4641:PRO:HD3	2.23	0.74
2:C:3926:GLY:HA2	2:C:4935:GLY:HA3	1.69	0.74
2:A:11:ILE:HG23	2:A:13:PHE:HE2	1.52	0.74
2:D:3214:LEU:O	2:D:3218:ILE:HG22	1.88	0.73
2:C:4640:PHE:CD2	2:C:4641:PRO:HD3	2.23	0.73
2:D:3605:MET:C	2:D:3605:MET:HE3	2.13	0.73
2:D:4640:PHE:CD2	2:D:4641:PRO:HD3	2.23	0.73
2:B:11:ILE:HG23	2:B:13:PHE:HE2	1.52	0.73
2:B:3605:MET:C	2:B:3605:MET:HE3	2.13	0.73
2:B:3926:GLY:HA2	2:B:4935:GLY:HA3	1.69	0.73
2:D:3926:GLY:HA2	2:D:4935:GLY:HA3	1.69	0.73
2:C:930:ASN:O	2:C:934:GLN:NE2	2.22	0.73
2:A:3605:MET:C	2:A:3605:MET:HE3	2.13	0.73
2:A:930:ASN:O	2:A:934:GLN:NE2	2.22	0.72
2:D:930:ASN:O	2:D:934:GLN:NE2	2.22	0.72
2:A:2852:TRP:CD1	2:A:2884:LYS:HZ1	2.07	0.72
2:B:844:ARG:NH1	2:B:845:THR:OG1	2.23	0.72
2:D:844:ARG:NH1	2:D:845:THR:OG1	2.23	0.72
2:B:3214:LEU:O	2:B:3218:ILE:HG22	1.88	0.72
2:A:844:ARG:NH1	2:A:845:THR:OG1	2.22	0.72
2:A:3214:LEU:O	2:A:3218:ILE:HG22	1.88	0.72
2:A:3134:LEU:HD12	2:A:3162:PHE:HE2	1.55	0.72
2:C:844:ARG:NH1	2:C:845:THR:OG1	2.23	0.72
2:D:2123:LEU:HD13	2:D:2167:MET:HG2	1.71	0.72
2:B:2123:LEU:HD13	2:B:2167:MET:HG2	1.71	0.72
2:D:3134:LEU:HD12	2:D:3162:PHE:HE2	1.55	0.71
2:C:3284:ILE:O	2:C:3288:LEU:HB2	1.90	0.71
2:B:930:ASN:O	2:B:934:GLN:NE2	2.22	0.71
2:B:3134:LEU:HD12	2:B:3162:PHE:HE2	1.55	0.71
2:C:2123:LEU:HD13	2:C:2167:MET:HG2	1.71	0.71
2:D:885:LEU:HD11	2:D:1057:LEU:HD13	1.73	0.71

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:3284:ILE:O	2:D:3288:LEU:HB2	1.90	0.71
2:B:449:ILE:HD13	2:B:522:ALA:HA	1.73	0.71
2:A:3284:ILE:O	2:A:3288:LEU:HB2	1.90	0.71
2:D:3595:ARG:HD3	3:L:146:MET:HG3	1.71	0.71
2:C:885:LEU:HD11	2:C:1057:LEU:HD13	1.73	0.71
2:B:2129:LEU:HD22	2:B:2132:VAL:HG21	1.73	0.71
2:A:2129:LEU:HD22	2:A:2132:VAL:HG21	1.73	0.71
2:D:1499:GLY:HA3	2:C:2824:ARG:HH21	1.56	0.71
2:D:2852:TRP:CD1	2:D:2884:LYS:HZ1	2.09	0.71
2:B:3284:ILE:O	2:B:3288:LEU:HB2	1.90	0.71
2:C:449:ILE:HD13	2:C:522:ALA:HA	1.73	0.71
2:C:3134:LEU:HD12	2:C:3162:PHE:HE2	1.55	0.71
2:D:2129:LEU:HD22	2:D:2132:VAL:HG21	1.73	0.70
2:A:2123:LEU:HD13	2:A:2167:MET:HG2	1.71	0.70
2:D:4484:ILE:HG22	2:C:4279:MET:SD	2.31	0.70
2:B:2703:PRO:HB2	2:B:2854:LYS:HD3	1.74	0.70
2:C:2129:LEU:HD22	2:C:2132:VAL:HG21	1.73	0.70
2:B:1979:PHE:CD1	2:B:1993:ARG:HG2	2.26	0.70
2:C:1979:PHE:CD1	2:C:1993:ARG:HG2	2.27	0.70
2:A:2703:PRO:HB2	2:A:2854:LYS:HD3	1.74	0.70
2:A:2702:ASN:ND2	2:A:2702:ASN:O	2.24	0.70
2:D:3266:THR:HB	2:D:3268:LEU:HD13	1.74	0.70
2:B:885:LEU:HD11	2:B:1057:LEU:HD13	1.73	0.70
2:C:756:SER:HB2	2:C:769:ARG:HB2	1.74	0.70
2:C:1129:GLY:HA3	2:C:1145:TRP:HB3	1.74	0.70
2:B:756:SER:HB2	2:B:769:ARG:HB2	1.74	0.70
2:B:3266:THR:HB	2:B:3268:LEU:HD13	1.74	0.70
2:A:3266:THR:HB	2:A:3268:LEU:HD13	1.74	0.69
2:C:3183:ILE:HG12	2:C:3192:ARG:HH22	1.57	0.69
2:A:449:ILE:HD13	2:A:522:ALA:HA	1.73	0.69
2:D:756:SER:HB2	2:D:769:ARG:HB2	1.74	0.69
2:D:1979:PHE:CD1	2:D:1993:ARG:HG2	2.27	0.69
2:B:2702:ASN:O	2:B:2702:ASN:ND2	2.24	0.69
2:C:3266:THR:HB	2:C:3268:LEU:HD13	1.74	0.69
2:A:4930:GLU:HA	2:A:4933:HIS:CE1	2.27	0.69
2:D:449:ILE:HD13	2:D:522:ALA:HA	1.73	0.69
2:D:2627:TRP:HB3	2:D:2630:PHE:HB2	1.75	0.69
2:C:1979:PHE:HB2	2:C:3628:TRP:HZ2	1.58	0.69
2:C:4930:GLU:HA	2:C:4933:HIS:CE1	2.28	0.69
2:A:885:LEU:HD11	2:A:1057:LEU:HD13	1.73	0.69
2:A:3183:ILE:HG12	2:A:3192:ARG:HH22	1.58	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:2703:PRO:HB2	2:D:2854:LYS:HD3	1.74	0.69
2:B:1129:GLY:HA3	2:B:1145:TRP:HB3	1.74	0.69
2:B:2917:ILE:HG22	2:B:2920:ARG:HH21	1.58	0.69
2:C:2860:LEU:HD23	2:C:2863:LYS:HZ1	1.55	0.69
2:D:3183:ILE:HG12	2:D:3192:ARG:HH22	1.58	0.69
2:B:4930:GLU:HA	2:B:4933:HIS:CE1	2.27	0.69
2:A:756:SER:HB2	2:A:769:ARG:HB2	1.74	0.69
2:A:2917:ILE:HG22	2:A:2920:ARG:HH21	1.58	0.69
2:D:2702:ASN:O	2:D:2702:ASN:ND2	2.24	0.69
2:B:2833:LEU:HD11	2:B:2894:LYS:HG3	1.75	0.69
2:C:2627:TRP:HB3	2:C:2630:PHE:HB2	1.75	0.69
2:C:2702:ASN:O	2:C:2702:ASN:ND2	2.24	0.69
2:C:2703:PRO:HB2	2:C:2854:LYS:HD3	1.74	0.69
2:A:1979:PHE:CD1	2:A:1993:ARG:HG2	2.27	0.69
2:A:2627:TRP:HB3	2:A:2630:PHE:HB2	1.75	0.69
2:B:2860:LEU:HD23	2:B:2863:LYS:HZ1	1.58	0.68
2:A:2833:LEU:HD11	2:A:2894:LYS:HG3	1.75	0.68
2:D:1979:PHE:HB2	2:D:3628:TRP:HZ2	1.58	0.68
2:D:2917:ILE:HG22	2:D:2920:ARG:HH21	1.58	0.68
2:A:1129:GLY:HA3	2:A:1145:TRP:HB3	1.74	0.68
2:A:1979:PHE:HB2	2:A:3628:TRP:HZ2	1.58	0.68
2:D:1129:GLY:HA3	2:D:1145:TRP:HB3	1.74	0.68
2:B:2627:TRP:HB3	2:B:2630:PHE:HB2	1.75	0.68
2:B:3131:TYR:CE1	2:B:3166:PHE:HZ	2.11	0.68
2:B:3183:ILE:HG12	2:B:3192:ARG:HH22	1.58	0.68
2:D:3701:ASP:OD2	2:D:3727:GLN:NE2	2.24	0.68
2:B:2887:GLU:O	2:B:2891:ASP:CB	2.42	0.68
2:A:1299:ILE:HD13	2:A:1546:GLN:HB2	1.75	0.68
2:A:3131:TYR:CE1	2:A:3166:PHE:HZ	2.11	0.68
1:G:52:GLY:N	1:G:61:GLU:OE2	2.24	0.68
2:C:2917:ILE:HG22	2:C:2920:ARG:HH21	1.57	0.68
3:J:112:ASN:ND2	3:J:117:LEU:O	2.27	0.68
2:D:2833:LEU:HD11	2:D:2894:LYS:HG3	1.75	0.68
2:D:2887:GLU:O	2:D:2891:ASP:CB	2.42	0.68
2:C:2882:LYS:HD2	2:C:2886:ARG:HH12	1.59	0.68
2:A:1703:TYR:CD2	2:A:1820:PRO:HB2	2.29	0.67
2:B:1979:PHE:HB2	2:B:3628:TRP:HZ2	1.58	0.67
2:B:2692:GLN:HA	2:B:2695:MET:HB2	1.77	0.67
2:C:1299:ILE:HD13	2:C:1546:GLN:HB2	1.75	0.67
2:C:1962:THR:HG23	2:C:1966:ARG:HE	1.59	0.67
2:A:308:LEU:HD13	2:A:393:MET:HG3	1.76	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:52:GLY:N	1:E:61:GLU:OE2	2.24	0.67
2:C:2692:GLN:HA	2:C:2695:MET:HB2	1.77	0.67
2:A:2882:LYS:HD2	2:A:2886:ARG:HH12	1.59	0.67
2:A:2887:GLU:O	2:A:2891:ASP:CB	2.42	0.67
2:D:3131:TYR:CE1	2:D:3166:PHE:HZ	2.11	0.67
2:B:1703:TYR:CD2	2:B:1820:PRO:HB2	2.29	0.67
2:C:308:LEU:HD13	2:C:393:MET:HG3	1.76	0.67
2:C:2833:LEU:HD11	2:C:2894:LYS:HG3	1.75	0.67
2:C:2887:GLU:O	2:C:2891:ASP:CB	2.42	0.67
2:A:3601:ALA:O	2:A:3605:MET:HB2	1.95	0.67
2:D:2882:LYS:HD2	2:D:2886:ARG:HH12	1.59	0.67
2:C:943:LEU:HD21	2:C:999:LEU:HD22	1.76	0.67
2:C:3131:TYR:CE1	2:C:3166:PHE:HZ	2.11	0.67
3:I:112:ASN:ND2	3:I:117:LEU:O	2.27	0.67
2:D:3601:ALA:O	2:D:3605:MET:HB2	1.95	0.67
2:D:1962:THR:HG23	2:D:1966:ARG:HE	1.59	0.67
2:D:3689:MET:HE2	2:D:3753:PRO:HB2	1.77	0.67
3:K:112:ASN:ND2	3:K:117:LEU:O	2.27	0.67
2:D:308:LEU:HD13	2:D:393:MET:HG3	1.76	0.67
2:B:1962:THR:HG23	2:B:1966:ARG:HE	1.60	0.67
2:A:3270:SER:HA	2:A:3273:MET:SD	2.35	0.67
2:B:1299:ILE:HD13	2:B:1546:GLN:HB2	1.76	0.67
1:H:24:VAL:HG22	1:H:48:LYS:HG2	1.76	0.67
2:D:1299:ILE:HD13	2:D:1546:GLN:HB2	1.75	0.67
2:C:3215:MET:HE3	2:C:3215:MET:HA	1.77	0.67
2:A:2692:GLN:HA	2:A:2695:MET:HB2	1.77	0.66
2:A:3689:MET:HE2	2:A:3753:PRO:HB2	1.77	0.66
2:B:2882:LYS:HD2	2:B:2886:ARG:HH12	1.59	0.66
2:A:943:LEU:HD21	2:A:999:LEU:HD22	1.76	0.66
2:D:1703:TYR:CD2	2:D:1820:PRO:HB2	2.29	0.66
2:B:1662:SER:OG	2:B:1708:ASP:OD2	2.14	0.66
2:A:3215:MET:HA	2:A:3215:MET:HE3	1.77	0.66
2:D:2692:GLN:HA	2:D:2695:MET:HB2	1.77	0.66
2:D:3215:MET:HA	2:D:3215:MET:HE3	1.77	0.66
2:B:2102:LEU:HD23	2:B:3625:GLU:HB2	1.78	0.66
2:C:3270:SER:HA	2:C:3273:MET:SD	2.35	0.66
2:B:3270:SER:HA	2:B:3273:MET:SD	2.35	0.66
2:C:1662:SER:OG	2:C:1708:ASP:OD2	2.14	0.66
2:C:1703:TYR:CD2	2:C:1820:PRO:HB2	2.29	0.66
2:A:1962:THR:HG23	2:A:1966:ARG:HE	1.59	0.66
2:D:1662:SER:OG	2:D:1708:ASP:OD2	2.13	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:308:LEU:HD13	2:B:393:MET:HG3	1.76	0.66
3:L:112:ASN:ND2	3:L:117:LEU:O	2.27	0.66
1:G:24:VAL:HG22	1:G:48:LYS:HG2	1.76	0.66
2:D:943:LEU:HD21	2:D:999:LEU:HD22	1.76	0.66
2:B:1766:PRO:HG3	2:B:1780:PRO:HB3	1.78	0.66
2:B:2852:TRP:CD1	2:B:2884:LYS:HZ2	2.13	0.66
2:B:3601:ALA:O	2:B:3605:MET:HB2	1.95	0.66
2:A:1766:PRO:HG3	2:A:1780:PRO:HB3	1.78	0.66
2:A:2102:LEU:HD23	2:A:3625:GLU:HB2	1.78	0.66
2:C:3601:ALA:O	2:C:3605:MET:HB2	1.95	0.66
2:C:2102:LEU:HD23	2:C:3625:GLU:HB2	1.78	0.66
2:A:915:HIS:HD2	2:A:916:PRO:HD2	1.62	0.65
2:C:2852:TRP:CD1	2:C:2884:LYS:HZ1	2.14	0.65
2:A:1662:SER:OG	2:A:1708:ASP:OD2	2.14	0.65
1:F:24:VAL:HG22	1:F:48:LYS:HG2	1.76	0.65
2:B:3050:LEU:HD23	2:B:3052:SER:H	1.61	0.65
2:B:943:LEU:HD21	2:B:999:LEU:HD22	1.76	0.65
2:B:3215:MET:HA	2:B:3215:MET:HE3	1.77	0.65
2:C:3689:MET:HE2	2:C:3753:PRO:HB2	1.77	0.65
2:D:1979:PHE:HB2	2:D:3628:TRP:CZ2	2.32	0.65
2:D:3050:LEU:HD23	2:D:3052:SER:H	1.61	0.65
2:A:2549:LEU:HB3	2:A:2588:LEU:HD22	1.79	0.65
2:D:3270:SER:HA	2:D:3273:MET:SD	2.35	0.65
2:B:3689:MET:HE2	2:B:3753:PRO:HB2	1.77	0.65
2:A:1979:PHE:HB2	2:A:3628:TRP:CZ2	2.32	0.65
2:D:2102:LEU:HD23	2:D:3625:GLU:HB2	1.78	0.65
2:C:915:HIS:HD2	2:C:916:PRO:HD2	1.61	0.65
2:A:2623:LEU:HD23	2:A:2625:GLY:H	1.62	0.65
2:D:1766:PRO:HG3	2:D:1780:PRO:HB3	1.78	0.65
2:D:2623:LEU:HD23	2:D:2625:GLY:H	1.62	0.65
2:D:3166:PHE:HE2	2:D:3168:VAL:HB	1.61	0.65
2:C:1766:PRO:HG3	2:C:1780:PRO:HB3	1.78	0.65
2:A:3166:PHE:HE2	2:A:3168:VAL:HB	1.61	0.65
2:A:3050:LEU:HD23	2:A:3052:SER:H	1.61	0.64
1:E:24:VAL:HG22	1:E:48:LYS:HG2	1.76	0.64
2:B:982:ASP:O	2:B:1055:ARG:NH1	2.27	0.64
2:D:878:LEU:HB3	2:D:940:LEU:CD2	2.28	0.64
2:C:1979:PHE:HB2	2:C:3628:TRP:CZ2	2.32	0.64
2:A:878:LEU:HB3	2:A:940:LEU:CD2	2.27	0.64
2:B:2549:LEU:HB3	2:B:2588:LEU:HD22	1.79	0.64
2:B:2844:MET:C	2:B:2844:MET:HE2	2.22	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:2296:GLU:HG3	2:A:2390:THR:HG22	1.80	0.64
2:B:2623:LEU:HD23	2:B:2625:GLY:H	1.62	0.64
2:B:3173:THR:HB	2:B:3201:VAL:HG12	1.79	0.64
2:C:3701:ASP:OD2	2:C:3727:GLN:NE2	2.24	0.64
2:D:2296:GLU:HG3	2:D:2390:THR:HG22	1.80	0.64
2:C:2623:LEU:HD23	2:C:2625:GLY:H	1.62	0.64
2:C:3166:PHE:HE2	2:C:3168:VAL:HB	1.61	0.64
1:F:52:GLY:N	1:F:61:GLU:OE2	2.24	0.64
2:D:3173:THR:HB	2:D:3201:VAL:HG12	1.79	0.64
2:B:915:HIS:HD2	2:B:916:PRO:HD2	1.62	0.64
2:C:3050:LEU:HD23	2:C:3052:SER:H	1.61	0.64
1:H:50:ARG:HB2	1:H:50:ARG:NH1	2.10	0.64
2:B:1910:LEU:HD13	2:B:2062:ILE:HG12	1.80	0.64
2:C:1910:LEU:HD13	2:C:2062:ILE:HG12	1.80	0.64
2:D:915:HIS:HD2	2:D:916:PRO:HD2	1.62	0.64
2:D:1842:ILE:HD12	2:D:1845:LEU:HD12	1.80	0.64
2:B:4690:LYS:HD3	2:B:4692:SER:H	1.63	0.64
2:A:3219:VAL:HG12	2:A:3279:ASN:HD22	1.63	0.64
1:F:36:LYS:HB2	2:B:647:ARG:HH12	1.62	0.64
2:D:2549:LEU:HB3	2:D:2588:LEU:HD22	1.79	0.64
2:A:1842:ILE:HD12	2:A:1845:LEU:HD12	1.80	0.64
2:D:3295:TRP:HA	2:D:3298:ARG:HG2	1.80	0.64
2:D:4690:LYS:HD3	2:D:4692:SER:H	1.63	0.64
2:C:878:LEU:HB3	2:C:940:LEU:CD2	2.27	0.64
2:C:2760:TYR:HA	2:C:2763:LEU:HD13	1.80	0.64
2:C:2844:MET:HE2	2:C:2844:MET:C	2.22	0.64
2:A:1010:ASP:OD1	2:A:1013:ARG:NH2	2.32	0.63
2:D:2844:MET:C	2:D:2844:MET:HE2	2.22	0.63
2:B:878:LEU:HB3	2:B:940:LEU:CD2	2.28	0.63
2:C:1154:ARG:H	2:C:1182:LEU:HD22	1.63	0.63
2:A:3030:VAL:HG22	2:A:3034:HIS:CE1	2.34	0.63
2:A:3173:THR:HB	2:A:3201:VAL:HG12	1.79	0.63
2:D:1154:ARG:H	2:D:1182:LEU:HD22	1.63	0.63
2:B:1842:ILE:HD12	2:B:1845:LEU:HD12	1.80	0.63
2:B:2760:TYR:HA	2:B:2763:LEU:HD13	1.80	0.63
1:E:50:ARG:HB2	1:E:50:ARG:NH1	2.10	0.63
2:D:4177:VAL:HG11	2:D:4880:VAL:HA	1.81	0.63
2:B:1979:PHE:HB2	2:B:3628:TRP:CZ2	2.32	0.63
2:B:2296:GLU:HG3	2:B:2390:THR:HG22	1.80	0.63
2:B:3166:PHE:HE2	2:B:3168:VAL:HB	1.61	0.63
2:C:3295:TRP:HA	2:C:3298:ARG:HG2	1.80	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:1154:ARG:H	2:A:1182:LEU:HD22	1.63	0.63
2:A:2844:MET:C	2:A:2844:MET:HE2	2.22	0.63
2:A:4177:VAL:HG11	2:A:4880:VAL:HA	1.81	0.63
2:D:4864:GLY:HA2	2:C:4867:ILE:HG12	1.80	0.63
2:B:3030:VAL:HG22	2:B:3034:HIS:CE1	2.34	0.63
2:A:3295:TRP:HA	2:A:3298:ARG:HG2	1.80	0.63
2:A:4690:LYS:HD3	2:A:4692:SER:H	1.63	0.63
2:D:3219:VAL:HG12	2:D:3279:ASN:HD22	1.63	0.63
2:B:1010:ASP:OD1	2:B:1013:ARG:NH2	2.32	0.63
2:B:3192:ARG:HB3	2:B:3199:THR:HG22	1.81	0.63
2:C:982:ASP:O	2:C:1055:ARG:NH1	2.27	0.63
2:C:3173:THR:HB	2:C:3201:VAL:HG12	1.79	0.63
2:A:824:GLU:OE1	2:A:1028:ARG:NH1	2.32	0.63
2:A:3192:ARG:HB3	2:A:3199:THR:HG22	1.81	0.63
2:A:4796:SER:HB3	2:A:4803:ASP:HB2	1.80	0.63
2:C:1842:ILE:HD12	2:C:1845:LEU:HD12	1.80	0.63
2:C:4690:LYS:HD3	2:C:4692:SER:H	1.63	0.63
2:D:4183:LYS:HB2	2:D:4183:LYS:HZ3	1.63	0.63
2:C:2549:LEU:HB3	2:C:2588:LEU:HD22	1.79	0.63
2:C:3030:VAL:HG22	2:C:3034:HIS:CE1	2.34	0.63
2:A:1910:LEU:HD13	2:A:2062:ILE:HG12	1.80	0.63
2:A:2760:TYR:HA	2:A:2763:LEU:HD13	1.80	0.63
2:D:3030:VAL:HG22	2:D:3034:HIS:CE1	2.34	0.63
2:D:4796:SER:HB3	2:D:4803:ASP:HB2	1.80	0.63
2:C:824:GLU:OE1	2:C:1028:ARG:NH1	2.32	0.63
2:C:2296:GLU:HG3	2:C:2390:THR:HG22	1.80	0.63
2:C:3192:ARG:HB3	2:C:3199:THR:HG22	1.81	0.63
2:B:824:GLU:OE1	2:B:1028:ARG:NH1	2.32	0.63
1:H:52:GLY:N	1:H:61:GLU:OE2	2.24	0.62
2:A:2785:TRP:HE3	2:A:2787:TRP:CZ2	2.17	0.62
2:D:824:GLU:OE1	2:D:1028:ARG:NH1	2.32	0.62
2:B:2785:TRP:HE3	2:B:2787:TRP:CZ2	2.17	0.62
2:B:3219:VAL:HG12	2:B:3279:ASN:HD22	1.63	0.62
2:A:2126:ILE:HA	2:A:2142:MET:CE	2.30	0.62
2:A:3595:ARG:HD3	3:I:146:MET:HG3	1.80	0.62
2:D:1010:ASP:OD1	2:D:1013:ARG:NH2	2.32	0.62
2:D:3250:TRP:HE1	2:D:3273:MET:CE	2.09	0.62
2:B:2126:ILE:HA	2:B:2142:MET:CE	2.30	0.62
2:B:3295:TRP:HA	2:B:3298:ARG:HG2	1.80	0.62
2:C:4177:VAL:HG11	2:C:4880:VAL:HA	1.81	0.62
2:D:1910:LEU:HD13	2:D:2062:ILE:HG12	1.79	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:2785:TRP:HE3	2:D:2787:TRP:CZ2	2.17	0.62
2:D:3135:THR:HA	2:D:3208:ILE:HD11	1.82	0.62
2:D:3192:ARG:HB3	2:D:3199:THR:HG22	1.81	0.62
2:D:114:LEU:HB2	2:D:117:HIS:CD2	2.35	0.62
2:C:2837:LEU:HD11	2:C:2893:LEU:HD12	1.82	0.62
2:C:4796:SER:HB3	2:C:4803:ASP:HB2	1.80	0.62
2:D:2760:TYR:HA	2:D:2763:LEU:HD13	1.80	0.62
2:B:114:LEU:HB2	2:B:117:HIS:CD2	2.35	0.62
2:B:4796:SER:HB3	2:B:4803:ASP:HB2	1.80	0.62
2:C:2785:TRP:HE3	2:C:2787:TRP:CZ2	2.17	0.62
2:D:1166:VAL:HG23	2:D:1173:MET:HG2	1.82	0.62
2:B:2837:LEU:HD11	2:B:2893:LEU:HD12	1.82	0.62
2:B:4177:VAL:HG11	2:B:4880:VAL:HA	1.81	0.62
2:C:1010:ASP:OD1	2:C:1013:ARG:NH2	2.32	0.62
2:C:1283:LEU:HB2	2:C:1555:PHE:HB2	1.82	0.62
2:C:114:LEU:HB2	2:C:117:HIS:CD2	2.35	0.62
2:C:3219:VAL:HG12	2:C:3279:ASN:HD22	1.63	0.62
2:A:982:ASP:O	2:A:1055:ARG:NH1	2.27	0.62
2:B:2496:LEU:HD23	2:B:2520:LEU:HD13	1.82	0.62
2:A:1166:VAL:HG23	2:A:1173:MET:HG2	1.82	0.61
2:D:2126:ILE:HA	2:D:2142:MET:CE	2.30	0.61
2:B:3311:LYS:HZ2	2:B:3313:GLN:HB2	1.64	0.61
2:C:2126:ILE:HA	2:C:2142:MET:CE	2.30	0.61
2:C:2496:LEU:HD23	2:C:2520:LEU:HD13	1.82	0.61
2:D:76:ARG:NE	2:C:3890:TRP:O	2.33	0.61
2:D:1283:LEU:HB2	2:D:1555:PHE:HB2	1.82	0.61
2:B:1154:ARG:H	2:B:1182:LEU:HD22	1.63	0.61
2:B:3965:ILE:HD12	2:B:4086:ARG:HD2	1.82	0.61
2:A:114:LEU:HB2	2:A:117:HIS:CD2	2.35	0.61
2:D:2837:LEU:HD11	2:D:2893:LEU:HD12	1.82	0.61
2:A:995:MET:HE2	2:A:1064:LEU:HD11	1.83	0.61
2:D:995:MET:HE2	2:D:1064:LEU:HD11	1.83	0.61
2:C:3311:LYS:HZ2	2:C:3313:GLN:HB2	1.65	0.61
2:A:1283:LEU:HB2	2:A:1555:PHE:HB2	1.82	0.61
1:G:50:ARG:HH11	1:G:50:ARG:CB	2.12	0.61
2:D:4110:PRO:HG3	2:D:4966:LEU:HD23	1.83	0.61
2:B:995:MET:HE2	2:B:1064:LEU:HD11	1.83	0.61
2:C:4187:GLU:OE2	2:C:4947:ARG:NH2	2.34	0.61
2:A:670:TYR:O	2:A:673:TRP:NE1	2.34	0.61
2:A:3135:THR:HA	2:A:3208:ILE:HD11	1.81	0.61
3:I:1:MET:HE2	3:I:1:MET:HA	1.83	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:3183:ILE:HG12	2:B:3192:ARG:NH2	2.16	0.61
2:B:4110:PRO:HG3	2:B:4966:LEU:HD23	1.83	0.61
2:B:3701:ASP:OD2	2:B:3727:GLN:NE2	2.24	0.61
3:K:1:MET:HA	3:K:1:MET:HE2	1.83	0.61
2:A:2837:LEU:HD11	2:A:2893:LEU:HD12	1.82	0.61
2:D:436:LEU:HD22	2:D:517:VAL:HG12	1.83	0.61
2:D:2496:LEU:HD23	2:D:2520:LEU:HD13	1.82	0.61
2:D:2867:ASN:O	2:D:2867:ASN:ND2	2.32	0.61
2:B:4187:GLU:OE2	2:B:4947:ARG:NH2	2.33	0.61
2:C:436:LEU:HD22	2:C:517:VAL:HG12	1.83	0.61
2:C:995:MET:HE2	2:C:1064:LEU:HD11	1.83	0.61
2:C:3965:ILE:HD12	2:C:4086:ARG:HD2	1.82	0.61
2:D:3183:ILE:HG12	2:D:3192:ARG:NH2	2.16	0.61
2:D:3311:LYS:HZ2	2:D:3313:GLN:HB2	1.64	0.61
2:B:670:TYR:O	2:B:673:TRP:NE1	2.34	0.61
2:A:3178:HIS:HB3	2:A:3263:MET:O	2.01	0.60
2:A:3183:ILE:HG12	2:A:3192:ARG:NH2	2.16	0.60
1:G:50:ARG:HB2	1:G:50:ARG:NH1	2.10	0.60
2:D:670:TYR:O	2:D:673:TRP:NE1	2.34	0.60
2:D:964:MET:O	2:D:977:LYS:NZ	2.34	0.60
2:B:3135:THR:HA	2:B:3208:ILE:HD11	1.82	0.60
2:B:1166:VAL:HG23	2:B:1173:MET:HG2	1.82	0.60
2:C:1166:VAL:HG23	2:C:1173:MET:HG2	1.82	0.60
2:A:1966:ARG:NH1	3:I:111:THR:OG1	2.34	0.60
2:C:3135:THR:HA	2:C:3208:ILE:HD11	1.81	0.60
2:A:2496:LEU:HD23	2:A:2520:LEU:HD13	1.82	0.60
2:A:3246:MET:HG3	2:A:3268:LEU:HD23	1.84	0.60
1:F:50:ARG:HB2	1:F:50:ARG:NH1	2.10	0.60
2:D:1979:PHE:HD1	2:D:1993:ARG:HG2	1.66	0.60
2:D:3178:HIS:HB3	2:D:3263:MET:O	2.01	0.60
2:B:3246:MET:HG3	2:B:3268:LEU:HD23	1.84	0.60
2:A:1979:PHE:HD1	2:A:1993:ARG:HG2	1.66	0.60
1:E:106:ASN:OD1	1:E:107:LEU:N	2.35	0.60
2:B:2409:ILE:HD13	2:B:2420:ARG:HD3	1.84	0.60
2:C:670:TYR:O	2:C:673:TRP:NE1	2.34	0.60
2:C:3246:MET:HG3	2:C:3268:LEU:HD23	1.84	0.60
2:A:2194:ALA:HA	2:A:2237:SER:HB3	1.84	0.60
2:A:3965:ILE:HD12	2:A:4086:ARG:HD2	1.82	0.60
2:D:1983:LYS:HE2	2:D:1985:GLU:OE1	2.01	0.60
2:B:3178:HIS:HB3	2:B:3263:MET:O	2.02	0.60
2:A:4580:THR:HG23	2:A:4726:MET:HE1	1.84	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:1788:LYS:HD2	2:D:1833:ILE:HG22	1.84	0.60
2:D:3965:ILE:HD12	2:D:4086:ARG:HD2	1.82	0.60
2:B:1283:LEU:HB2	2:B:1555:PHE:HB2	1.82	0.60
2:B:1788:LYS:HD2	2:B:1833:ILE:HG22	1.84	0.60
2:C:3183:ILE:HG12	2:C:3192:ARG:NH2	2.16	0.60
2:D:982:ASP:O	2:D:1055:ARG:NH1	2.27	0.60
2:C:1788:LYS:HD2	2:C:1833:ILE:HG22	1.84	0.60
2:A:436:LEU:HD22	2:A:517:VAL:HG12	1.83	0.60
2:A:1058:LEU:HD21	2:A:1064:LEU:HB3	1.84	0.60
2:A:1788:LYS:HD2	2:A:1833:ILE:HG22	1.84	0.60
2:A:1983:LYS:HE2	2:A:1985:GLU:OE1	2.01	0.60
2:D:3246:MET:HG3	2:D:3268:LEU:HD23	1.84	0.60
2:C:2194:ALA:HA	2:C:2237:SER:HB3	1.84	0.60
3:L:1:MET:HE2	3:L:1:MET:HA	1.83	0.60
2:A:2867:ASN:O	2:A:2867:ASN:ND2	2.32	0.59
2:D:2194:ALA:HA	2:D:2237:SER:HB3	1.84	0.59
2:B:1058:LEU:HD21	2:B:1064:LEU:HB3	1.84	0.59
2:B:3030:VAL:HG22	2:B:3034:HIS:HE1	1.68	0.59
2:C:4580:THR:HG23	2:C:4726:MET:HE1	1.83	0.59
1:H:106:ASN:OD1	1:H:107:LEU:N	2.35	0.59
2:A:4110:PRO:HG3	2:A:4966:LEU:HD23	1.83	0.59
2:D:1922:ILE:HD11	2:D:2105:THR:OG1	2.02	0.59
2:D:4580:THR:HG23	2:D:4726:MET:HE1	1.83	0.59
2:B:1983:LYS:HE2	2:B:1985:GLU:OE1	2.01	0.59
2:B:436:LEU:HD22	2:B:517:VAL:HG12	1.83	0.59
2:B:2481:GLN:NE2	2:B:2537:GLY:O	2.33	0.59
2:C:1058:LEU:HD21	2:C:1064:LEU:HB3	1.84	0.59
2:C:1922:ILE:HD11	2:C:2105:THR:OG1	2.02	0.59
2:C:2409:ILE:HD13	2:C:2420:ARG:HD3	1.84	0.59
2:C:3298:ARG:HA	2:C:3301:VAL:HG22	1.85	0.59
2:A:2409:ILE:HD13	2:A:2420:ARG:HD3	1.84	0.59
2:D:2844:MET:HE1	2:D:2848:TYR:CE2	2.37	0.59
2:B:2194:ALA:HA	2:B:2237:SER:HB3	1.84	0.59
2:B:2844:MET:HE1	2:B:2848:TYR:CE2	2.37	0.59
2:B:2845:ALA:HB1	2:B:2885:ASP:HB3	1.84	0.59
2:B:4252:ILE:HG21	2:C:4707:MET:HG3	1.85	0.59
2:C:1983:LYS:HE2	2:C:1985:GLU:OE1	2.01	0.59
2:C:2845:ALA:HB1	2:C:2885:ASP:HB3	1.84	0.59
2:C:3178:HIS:HB3	2:C:3263:MET:O	2.02	0.59
2:A:1922:ILE:HD11	2:A:2105:THR:OG1	2.02	0.59
2:A:2833:LEU:HD11	2:A:2894:LYS:CG	2.32	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:3250:TRP:HE1	2:A:3273:MET:CE	2.09	0.59
2:B:476:GLN:NE2	2:B:3678:GLU:OE1	2.35	0.59
2:B:1922:ILE:HD11	2:B:2105:THR:OG1	2.02	0.59
2:B:2833:LEU:HD11	2:B:2894:LYS:CG	2.32	0.59
2:B:3298:ARG:HA	2:B:3301:VAL:HG22	1.85	0.59
1:F:50:ARG:N	1:F:55:GLU:OE1	2.35	0.59
2:C:964:MET:O	2:C:977:LYS:NZ	2.34	0.59
2:C:4110:PRO:HG3	2:C:4966:LEU:HD23	1.83	0.59
2:C:4810:LEU:HG	2:C:4814:MET:HE1	1.85	0.59
2:A:476:GLN:NE2	2:A:3678:GLU:OE1	2.35	0.59
2:A:3298:ARG:HA	2:A:3301:VAL:HG22	1.85	0.59
2:D:924:LEU:HD12	2:D:925:PRO:HD2	1.85	0.59
2:B:924:LEU:HD12	2:B:925:PRO:HD2	1.85	0.59
2:B:2935:GLU:HA	2:B:2938:GLN:OE1	2.03	0.59
2:B:3728:GLN:HG2	2:B:3765:ILE:HA	1.84	0.59
2:C:2833:LEU:HD11	2:C:2894:LYS:CG	2.32	0.59
2:C:2859:GLU:OE1	2:C:2863:LYS:NZ	2.32	0.59
3:J:1:MET:HE2	3:J:1:MET:HA	1.83	0.59
2:A:924:LEU:HD12	2:A:925:PRO:HD2	1.85	0.59
2:A:2844:MET:HE1	2:A:2848:TYR:CE2	2.37	0.59
2:A:3315:LEU:HG	2:A:3319:PHE:HB2	1.85	0.59
2:C:476:GLN:NE2	2:C:3678:GLU:OE1	2.35	0.59
2:A:3004:VAL:HG13	2:A:3036:LEU:HD11	1.85	0.59
2:D:3030:VAL:O	2:D:3034:HIS:ND1	2.33	0.59
2:B:238:HIS:HE1	2:B:401:ASP:HA	1.68	0.59
2:B:3250:TRP:HE1	2:B:3273:MET:CE	2.09	0.59
2:C:2935:GLU:HA	2:C:2938:GLN:OE1	2.03	0.59
2:C:3030:VAL:HG22	2:C:3034:HIS:HE1	1.68	0.59
3:K:110:MET:HB3	3:K:121:GLU:HB3	1.85	0.59
1:E:50:ARG:N	1:E:55:GLU:OE1	2.35	0.59
2:D:238:HIS:HE1	2:D:401:ASP:HA	1.68	0.59
2:D:247:VAL:O	2:D:272:ARG:NH1	2.36	0.59
2:D:968:LYS:HA	2:D:971:GLN:HB3	1.85	0.59
2:D:3004:VAL:HG13	2:D:3036:LEU:HD11	1.85	0.59
2:D:3298:ARG:HA	2:D:3301:VAL:HG22	1.85	0.59
2:B:317:MET:HE3	2:B:322:ALA:HA	1.84	0.59
2:B:1979:PHE:HD1	2:B:1993:ARG:HG2	1.66	0.59
2:B:2478:ILE:HG21	2:B:2484:LEU:HD13	1.85	0.59
2:B:3288:LEU:HD12	2:B:3296:MET:HE1	1.85	0.59
2:B:4810:LEU:HG	2:B:4814:MET:HE1	1.85	0.59
2:C:238:HIS:HE1	2:C:401:ASP:HA	1.68	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:2844:MET:HE1	2:C:2848:TYR:CE2	2.37	0.59
3:L:110:MET:HB3	3:L:121:GLU:HB3	1.85	0.59
2:A:238:HIS:HE1	2:A:401:ASP:HA	1.68	0.58
2:A:4751:LYS:HG2	2:A:4754:ARG:HH12	1.68	0.58
1:F:106:ASN:OD1	1:F:107:LEU:N	2.35	0.58
1:G:106:ASN:OD1	1:G:107:LEU:N	2.35	0.58
2:D:2833:LEU:HD11	2:D:2894:LYS:CG	2.32	0.58
2:D:2935:GLU:HA	2:D:2938:GLN:OE1	2.03	0.58
2:B:247:VAL:O	2:B:272:ARG:NH1	2.36	0.58
2:B:4010:VAL:HG11	2:B:4118:PHE:HZ	1.69	0.58
2:A:4010:VAL:HG11	2:A:4118:PHE:HZ	1.68	0.58
1:F:50:ARG:HH11	1:F:50:ARG:CB	2.12	0.58
2:D:2085:PHE:HB3	2:D:3691:TYR:HE2	1.69	0.58
2:D:2409:ILE:HD13	2:D:2420:ARG:HD3	1.84	0.58
2:B:312:LYS:HD2	2:B:312:LYS:O	2.03	0.58
2:C:247:VAL:O	2:C:272:ARG:NH1	2.36	0.58
2:C:829:LYS:HD3	2:C:829:LYS:N	2.18	0.58
2:C:2867:ASN:ND2	2:C:2867:ASN:O	2.32	0.58
2:A:2478:ILE:HG21	2:A:2484:LEU:HD13	1.85	0.58
2:A:3803:LEU:HB2	2:A:3884:SER:HB3	1.85	0.58
2:A:4187:GLU:OE2	2:A:4947:ARG:NH2	2.33	0.58
2:A:4773:LEU:HD13	2:D:4753:LEU:HD21	1.85	0.58
2:D:3728:GLN:HG2	2:D:3765:ILE:HA	1.84	0.58
2:D:4867:ILE:HD12	2:C:4867:ILE:HD13	1.85	0.58
2:B:829:LYS:HD3	2:B:829:LYS:N	2.18	0.58
2:C:312:LYS:O	2:C:312:LYS:HD2	2.03	0.58
2:A:2770:ILE:HG13	2:A:2771:TYR:HD1	1.67	0.58
2:D:1058:LEU:HD21	2:D:1064:LEU:HB3	1.84	0.58
2:D:2770:ILE:HG13	2:D:2771:TYR:HD1	1.68	0.58
2:D:3030:VAL:HG22	2:D:3034:HIS:HE1	1.67	0.58
2:D:3315:LEU:HG	2:D:3319:PHE:HB2	1.85	0.58
2:C:924:LEU:HD12	2:C:925:PRO:HD2	1.85	0.58
2:C:1979:PHE:HD1	2:C:1993:ARG:HG2	1.66	0.58
2:C:3288:LEU:HD12	2:C:3296:MET:HE1	1.85	0.58
2:C:4010:VAL:HG11	2:C:4118:PHE:HZ	1.68	0.58
2:A:2923:TYR:O	2:A:2927:GLN:HG3	2.04	0.58
2:D:2845:ALA:HB1	2:D:2885:ASP:HB3	1.84	0.58
2:D:4010:VAL:HG11	2:D:4118:PHE:HZ	1.69	0.58
2:B:3315:LEU:HG	2:B:3319:PHE:HB2	1.85	0.58
2:B:3803:LEU:HB2	2:B:3884:SER:HB3	1.85	0.58
2:C:2129:LEU:HD13	2:C:2138:GLU:HB3	1.85	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:317:MET:HE3	2:D:322:ALA:HA	1.85	0.58
2:D:2481:GLN:NE2	2:D:2537:GLY:O	2.33	0.58
2:D:2923:TYR:O	2:D:2927:GLN:HG3	2.04	0.58
2:C:317:MET:HE3	2:C:322:ALA:HA	1.85	0.58
2:C:2923:TYR:O	2:C:2927:GLN:HG3	2.04	0.58
2:C:3250:TRP:HE1	2:C:3273:MET:CE	2.09	0.58
2:A:895:MET:HB3	2:A:970:TYR:CE1	2.39	0.58
2:A:968:LYS:HA	2:A:971:GLN:HB3	1.85	0.58
2:A:2129:LEU:HD13	2:A:2138:GLU:HB3	1.85	0.58
2:A:3701:ASP:OD2	2:A:3727:GLN:NE2	2.24	0.58
2:A:4661:TYR:HB3	2:A:4665:ARG:HH21	1.69	0.58
2:D:476:GLN:NE2	2:D:3678:GLU:OE1	2.35	0.58
2:D:895:MET:HB3	2:D:970:TYR:CE1	2.39	0.58
2:B:2436:ILE:HA	2:B:2465:LYS:HD2	1.86	0.58
2:B:4580:THR:HG23	2:B:4726:MET:HE1	1.84	0.58
2:C:968:LYS:HA	2:C:971:GLN:HB3	1.85	0.58
2:D:312:LYS:HD2	2:D:312:LYS:O	2.03	0.58
2:D:3940:LEU:HD11	2:D:3981:MET:HE1	1.85	0.58
2:C:2154:VAL:HG13	2:C:2158:HIS:HD2	1.69	0.58
2:A:312:LYS:HD2	2:A:312:LYS:O	2.03	0.58
2:A:4810:LEU:HG	2:A:4814:MET:HE1	1.85	0.58
2:C:2770:ILE:HG13	2:C:2771:TYR:HD1	1.67	0.58
2:A:2935:GLU:HA	2:A:2938:GLN:OE1	2.03	0.58
3:I:110:MET:HB3	3:I:121:GLU:HB3	1.85	0.58
2:D:2478:ILE:HG21	2:D:2484:LEU:HD13	1.85	0.58
2:C:3728:GLN:HG2	2:C:3765:ILE:HA	1.84	0.58
2:A:2845:ALA:HB1	2:A:2885:ASP:HB3	1.84	0.57
2:A:3940:LEU:HD11	2:A:3981:MET:HE1	1.85	0.57
2:D:332:ARG:HH12	2:D:340:VAL:HB	1.68	0.57
2:D:2859:GLU:OE1	2:D:2863:LYS:NZ	2.32	0.57
2:B:895:MET:HB3	2:B:970:TYR:CE1	2.39	0.57
2:B:968:LYS:HA	2:B:971:GLN:HB3	1.85	0.57
2:B:2867:ASN:O	2:B:2867:ASN:ND2	2.32	0.57
2:C:3043:ARG:HH21	2:C:3120:ASP:HB2	1.69	0.57
2:A:247:VAL:O	2:A:272:ARG:NH1	2.36	0.57
2:A:1614:ARG:NH2	2:A:1615:GLN:OE1	2.37	0.57
2:D:4810:LEU:HG	2:D:4814:MET:HE1	1.85	0.57
2:B:4751:LYS:HG2	2:B:4754:ARG:HH12	1.68	0.57
2:C:2085:PHE:HB3	2:C:3691:TYR:HE2	1.69	0.57
2:C:3004:VAL:HG13	2:C:3036:LEU:HD11	1.85	0.57
2:A:1894:LEU:HD22	2:A:2065:THR:HG21	1.87	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:2859:GLU:OE1	2:A:2863:LYS:NZ	2.32	0.57
2:A:3231:MET:HE1	2:A:3234:VAL:HB	1.86	0.57
2:B:897:LYS:HB2	2:B:918:LEU:HD21	1.86	0.57
2:B:1894:LEU:HD22	2:B:2065:THR:HG21	1.87	0.57
2:B:3043:ARG:HH21	2:B:3120:ASP:HB2	1.69	0.57
2:C:3030:VAL:O	2:C:3034:HIS:ND1	2.33	0.57
3:J:110:MET:HB3	3:J:121:GLU:HB3	1.85	0.57
2:A:332:ARG:HH12	2:A:340:VAL:HB	1.68	0.57
2:A:829:LYS:N	2:A:829:LYS:HD3	2.18	0.57
2:A:2085:PHE:HB3	2:A:3691:TYR:HE2	1.69	0.57
2:D:1614:ARG:NH2	2:D:1615:GLN:OE1	2.37	0.57
2:B:3004:VAL:HG13	2:B:3036:LEU:HD11	1.85	0.57
2:C:332:ARG:HH12	2:C:340:VAL:HB	1.68	0.57
2:C:2882:LYS:O	2:C:2886:ARG:HD3	2.05	0.57
2:C:3231:MET:HE1	2:C:3234:VAL:HB	1.87	0.57
2:C:3315:LEU:HG	2:C:3319:PHE:HB2	1.85	0.57
1:H:26:HIS:HB2	1:H:105:LEU:HD11	1.87	0.57
2:A:317:MET:HE3	2:A:322:ALA:HA	1.85	0.57
2:A:647:ARG:HH12	1:E:36:LYS:HB2	1.70	0.57
2:D:271:ALA:HB2	2:D:488:LEU:HD22	1.86	0.57
2:D:3288:LEU:HD12	2:D:3296:MET:HE1	1.85	0.57
2:D:4751:LYS:HG2	2:D:4754:ARG:HH12	1.68	0.57
2:B:271:ALA:HB2	2:B:488:LEU:HD22	1.86	0.57
2:B:2923:TYR:O	2:B:2927:GLN:HG3	2.03	0.57
2:C:1614:ARG:NH2	2:C:1615:GLN:OE1	2.37	0.57
2:C:2758:LYS:HB2	2:C:2762:LEU:HD23	1.86	0.57
3:J:10:ILE:HA	3:J:13:PHE:HD2	1.70	0.57
2:A:2882:LYS:O	2:A:2886:ARG:HD3	2.05	0.57
2:A:3728:GLN:HG2	2:A:3765:ILE:HA	1.84	0.57
1:F:26:HIS:HB2	1:F:105:LEU:HD11	1.86	0.57
1:G:26:HIS:CD2	1:G:41:ARG:HG2	2.40	0.57
2:D:544:ASN:HB3	2:D:547:ASN:HB2	1.87	0.57
2:D:829:LYS:HD3	2:D:829:LYS:N	2.18	0.57
2:D:2758:LYS:HB2	2:D:2762:LEU:HD23	1.86	0.57
2:D:2882:LYS:O	2:D:2886:ARG:HD3	2.05	0.57
2:D:3043:ARG:HH21	2:D:3120:ASP:HB2	1.69	0.57
2:B:606:ARG:HH22	2:B:1632:ILE:HG23	1.70	0.57
2:B:2770:ILE:HG13	2:B:2771:TYR:HD1	1.67	0.57
2:B:4661:TYR:HB3	2:B:4665:ARG:HH21	1.69	0.57
2:C:706:TYR:HE1	2:C:1254:ARG:HD2	1.70	0.57
3:K:105:GLU:O	3:K:108:HIS:ND1	2.38	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:13:PHE:CD1	2:A:174:LYS:HD2	2.39	0.57
2:A:544:ASN:HB3	2:A:547:ASN:HB2	1.87	0.57
2:A:1436:GLN:NE2	2:A:1546:GLN:O	2.38	0.57
2:A:2154:VAL:HG13	2:A:2158:HIS:HD2	1.69	0.57
2:A:2436:ILE:HA	2:A:2465:LYS:HD2	1.86	0.57
1:G:50:ARG:N	1:G:55:GLU:OE1	2.35	0.57
3:I:105:GLU:O	3:I:108:HIS:ND1	2.38	0.57
2:D:3803:LEU:HB2	2:D:3884:SER:HB3	1.85	0.57
2:B:1436:GLN:NE2	2:B:1546:GLN:O	2.38	0.57
2:B:1614:ARG:NH2	2:B:1615:GLN:OE1	2.37	0.57
2:B:2773:TRP:HE3	2:B:2776:LYS:HE3	1.70	0.57
2:B:3231:MET:HE1	2:B:3234:VAL:HB	1.87	0.57
2:B:4679:PHE:O	2:B:4682:ALA:C	2.48	0.57
2:C:606:ARG:HH22	2:C:1632:ILE:HG23	1.70	0.57
2:C:2773:TRP:HE3	2:C:2776:LYS:HE3	1.70	0.57
3:J:105:GLU:O	3:J:108:HIS:ND1	2.38	0.57
1:H:50:ARG:HH11	1:H:50:ARG:CB	2.12	0.57
2:A:2920:ARG:HG3	2:A:2923:TYR:H	1.70	0.57
1:F:26:HIS:CD2	1:F:41:ARG:HG2	2.40	0.57
2:D:1436:GLN:NE2	2:D:1546:GLN:O	2.38	0.57
2:D:2154:VAL:HG13	2:D:2158:HIS:HD2	1.69	0.57
2:D:2920:ARG:HG3	2:D:2923:TYR:H	1.70	0.57
2:B:2129:LEU:HD13	2:B:2138:GLU:HB3	1.85	0.57
2:B:2920:ARG:HG3	2:B:2923:TYR:H	1.70	0.57
2:C:897:LYS:HB2	2:C:918:LEU:HD21	1.87	0.57
2:C:1436:GLN:NE2	2:C:1546:GLN:O	2.38	0.57
2:C:2478:ILE:HG21	2:C:2484:LEU:HD13	1.85	0.57
2:C:2920:ARG:HG3	2:C:2923:TYR:H	1.70	0.57
3:K:10:ILE:HA	3:K:13:PHE:HD2	1.70	0.57
1:H:26:HIS:CD2	1:H:41:ARG:HG2	2.40	0.57
2:A:3288:LEU:HD12	2:A:3296:MET:HE1	1.85	0.57
2:D:3595:ARG:CD	3:L:146:MET:HG3	2.34	0.57
2:B:706:TYR:HE1	2:B:1254:ARG:HD2	1.70	0.57
2:B:780:GLU:OE2	2:B:1468:THR:OG1	2.20	0.57
2:B:2859:GLU:OE1	2:B:2863:LYS:NZ	2.32	0.57
2:B:3030:VAL:O	2:B:3034:HIS:ND1	2.33	0.57
2:C:839:GLU:HB3	2:C:851:LEU:HD12	1.87	0.57
2:C:3803:LEU:HB2	2:C:3884:SER:HB3	1.85	0.57
2:C:4679:PHE:O	2:C:4682:ALA:C	2.48	0.57
1:H:50:ARG:N	1:H:55:GLU:OE1	2.35	0.57
2:A:897:LYS:HB2	2:A:918:LEU:HD21	1.86	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:3030:VAL:HG22	2:A:3034:HIS:HE1	1.67	0.57
1:F:83:TYR:OH	2:B:1768:PHE:O	2.16	0.57
3:I:10:ILE:HA	3:I:13:PHE:HD2	1.70	0.57
2:D:13:PHE:CD1	2:D:174:LYS:HD2	2.40	0.57
2:D:3231:MET:HE1	2:D:3234:VAL:HB	1.86	0.57
2:B:332:ARG:HH12	2:B:340:VAL:HB	1.68	0.57
2:C:2436:ILE:HA	2:C:2465:LYS:HD2	1.86	0.57
3:L:105:GLU:O	3:L:108:HIS:ND1	2.38	0.57
2:A:606:ARG:HH22	2:A:1632:ILE:HG23	1.70	0.56
2:A:2758:LYS:HB2	2:A:2762:LEU:HD23	1.86	0.56
1:E:26:HIS:CD2	1:E:41:ARG:HG2	2.40	0.56
2:D:2202:TYR:O	2:D:2206:ILE:HG12	2.05	0.56
2:D:2736:LYS:HD2	2:D:2757:MET:SD	2.45	0.56
2:D:4661:TYR:HB3	2:D:4665:ARG:HH21	1.69	0.56
2:B:3800:CYS:O	2:B:3880:ARG:NH2	2.38	0.56
2:C:13:PHE:CD1	2:C:174:LYS:HD2	2.39	0.56
2:C:271:ALA:HB2	2:C:488:LEU:HD22	1.86	0.56
2:C:4751:LYS:HG2	2:C:4754:ARG:HH12	1.68	0.56
2:A:4679:PHE:O	2:A:4682:ALA:C	2.48	0.56
2:D:1894:LEU:HD22	2:D:2065:THR:HG21	1.87	0.56
2:B:544:ASN:HB3	2:B:547:ASN:HB2	1.87	0.56
2:B:2085:PHE:HB3	2:B:3691:TYR:HE2	1.69	0.56
2:B:2154:VAL:HG13	2:B:2158:HIS:HD2	1.69	0.56
2:B:2882:LYS:O	2:B:2886:ARG:HD3	2.05	0.56
2:C:4661:TYR:HB3	2:C:4665:ARG:HH21	1.69	0.56
2:A:271:ALA:HB2	2:A:488:LEU:HD22	1.86	0.56
2:A:706:TYR:HE1	2:A:1254:ARG:HD2	1.70	0.56
2:A:1843:LEU:HD23	2:A:1846:ILE:HD12	1.88	0.56
2:A:2736:LYS:HD2	2:A:2757:MET:SD	2.45	0.56
2:A:2764:SER:O	2:A:2768:LYS:HG3	2.05	0.56
2:A:2773:TRP:HE3	2:A:2776:LYS:HE3	1.70	0.56
2:A:3311:LYS:HZ2	2:A:3313:GLN:HB2	1.69	0.56
2:A:3800:CYS:O	2:A:3880:ARG:NH2	2.38	0.56
2:D:606:ARG:HH22	2:D:1632:ILE:HG23	1.70	0.56
2:D:2436:ILE:HA	2:D:2465:LYS:HD2	1.86	0.56
2:D:2764:SER:O	2:D:2768:LYS:HG3	2.05	0.56
2:B:839:GLU:HB3	2:B:851:LEU:HD12	1.87	0.56
2:B:2202:TYR:O	2:B:2206:ILE:HG12	2.05	0.56
2:B:2764:SER:O	2:B:2768:LYS:HG3	2.05	0.56
2:B:3940:LEU:HD11	2:B:3981:MET:HE1	1.85	0.56
2:C:895:MET:HB3	2:C:970:TYR:CE1	2.39	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:2202:TYR:O	2:C:2206:ILE:HG12	2.05	0.56
2:C:2764:SER:O	2:C:2768:LYS:HG3	2.05	0.56
3:L:10:ILE:HA	3:L:13:PHE:HD2	1.70	0.56
2:A:3043:ARG:HH21	2:A:3120:ASP:HB2	1.69	0.56
2:D:1947:VAL:HG21	2:D:1961:LYS:HG2	1.88	0.56
2:D:2773:TRP:HE3	2:D:2776:LYS:HE3	1.70	0.56
2:B:13:PHE:CD1	2:B:174:LYS:HD2	2.39	0.56
2:C:1947:VAL:HG21	2:C:1961:LYS:HG2	1.88	0.56
2:C:3940:LEU:HD11	2:C:3981:MET:HE1	1.85	0.56
2:A:2222:LEU:HB3	2:A:2264:LYS:HD2	1.87	0.56
2:B:2860:LEU:HD23	2:B:2863:LYS:NZ	2.21	0.56
2:D:3814:ALA:HA	2:D:3819:MET:HE2	1.87	0.56
2:C:1894:LEU:HD22	2:C:2065:THR:HG21	1.87	0.56
2:C:2585:MET:HE3	2:C:2585:MET:N	2.21	0.56
2:C:3814:ALA:HA	2:C:3819:MET:HE2	1.87	0.56
2:A:1303:ARG:HA	2:A:1542:ALA:HA	1.87	0.56
2:D:2129:LEU:HD13	2:D:2138:GLU:HB3	1.85	0.56
2:D:4187:GLU:OE2	2:D:4947:ARG:NH2	2.33	0.56
2:D:4679:PHE:O	2:D:4682:ALA:C	2.48	0.56
2:B:2701:PHE:CE2	2:B:2703:PRO:HG3	2.41	0.56
2:B:2714:PRO:HD2	2:B:2717:LEU:HD12	1.87	0.56
2:C:2736:LYS:HD2	2:C:2757:MET:SD	2.45	0.56
3:J:82:SER:HA	3:J:85:GLU:HB3	1.88	0.56
2:A:2714:PRO:HD2	2:A:2717:LEU:HD12	1.87	0.56
2:A:3677:THR:O	2:A:3679:LYS:NZ	2.39	0.56
1:E:75:LEU:HD22	1:E:102:VAL:HG21	1.88	0.56
2:D:897:LYS:HB2	2:D:918:LEU:HD21	1.87	0.56
2:D:2939:TYR:O	2:D:2943:PHE:HD1	1.89	0.56
2:D:3800:CYS:O	2:D:3880:ARG:NH2	2.38	0.56
2:C:2703:PRO:O	2:C:2854:LYS:HD3	2.06	0.56
2:A:2860:LEU:HD23	2:A:2863:LYS:NZ	2.21	0.56
1:E:26:HIS:HB2	1:E:105:LEU:HD11	1.87	0.56
2:D:706:TYR:HE1	2:D:1254:ARG:HD2	1.70	0.56
2:D:839:GLU:HB3	2:D:851:LEU:HD12	1.87	0.56
2:B:1947:VAL:HG21	2:B:1961:LYS:HG2	1.88	0.56
2:B:2238:THR:HG22	2:B:2240:LEU:H	1.71	0.56
2:C:1303:ARG:HA	2:C:1542:ALA:HA	1.88	0.56
2:C:1843:LEU:HD23	2:C:1846:ILE:HD12	1.88	0.56
2:C:2222:LEU:HB3	2:C:2264:LYS:HD2	1.87	0.56
2:C:2860:LEU:HD23	2:C:2863:LYS:NZ	2.21	0.56
2:A:2126:ILE:HG12	2:A:2142:MET:SD	2.46	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:2481:GLN:NE2	2:A:2537:GLY:O	2.33	0.56
1:E:50:ARG:HH11	1:E:50:ARG:CB	2.12	0.56
2:B:3684:GLU:HG2	2:B:3689:MET:HE1	1.88	0.56
2:A:2939:TYR:O	2:A:2943:PHE:HD1	1.89	0.55
2:A:3131:TYR:CE1	2:A:3166:PHE:CZ	2.93	0.55
2:D:1843:LEU:HD23	2:D:1846:ILE:HD12	1.88	0.55
2:D:2126:ILE:HG12	2:D:2142:MET:SD	2.46	0.55
2:D:2860:LEU:HD23	2:D:2863:LYS:NZ	2.21	0.55
2:D:4930:GLU:HA	2:D:4933:HIS:CD2	2.41	0.55
2:B:2126:ILE:HG12	2:B:2142:MET:SD	2.46	0.55
2:B:2222:LEU:HB3	2:B:2264:LYS:HD2	1.87	0.55
2:B:2736:LYS:HD2	2:B:2757:MET:SD	2.45	0.55
2:B:2758:LYS:HB2	2:B:2762:LEU:HD23	1.86	0.55
2:C:3800:CYS:O	2:C:3880:ARG:NH2	2.38	0.55
2:A:839:GLU:HB3	2:A:851:LEU:HD12	1.88	0.55
2:A:1790:LYS:O	2:A:1794:MET:HG3	2.06	0.55
2:A:2824:ARG:NH2	2:B:1499:GLY:HA3	2.21	0.55
1:G:75:LEU:HD22	1:G:102:VAL:HG21	1.88	0.55
2:D:1790:LYS:O	2:D:1794:MET:HG3	2.06	0.55
2:D:2222:LEU:HB3	2:D:2264:LYS:HD2	1.87	0.55
2:D:2703:PRO:O	2:D:2854:LYS:HD3	2.06	0.55
2:C:3677:THR:O	2:C:3679:LYS:NZ	2.39	0.55
2:A:1947:VAL:HG21	2:A:1961:LYS:HG2	1.88	0.55
2:D:3677:THR:O	2:D:3679:LYS:NZ	2.39	0.55
2:C:544:ASN:HB3	2:C:547:ASN:HB2	1.87	0.55
2:C:2867:ASN:HD22	2:C:2867:ASN:C	2.13	0.55
2:A:2238:THR:HG22	2:A:2240:LEU:H	1.71	0.55
2:D:1977:LEU:HD23	2:D:1979:PHE:HE2	1.72	0.55
2:D:2701:PHE:CE2	2:D:2703:PRO:HG3	2.41	0.55
2:B:1303:ARG:HA	2:B:1542:ALA:HA	1.87	0.55
2:B:2703:PRO:O	2:B:2854:LYS:HD3	2.06	0.55
2:C:2238:THR:HG22	2:C:2240:LEU:H	1.71	0.55
2:C:2982:PHE:O	2:C:3001:LYS:NZ	2.40	0.55
2:A:3814:ALA:HA	2:A:3819:MET:HE2	1.87	0.55
2:A:4252:ILE:HG21	2:B:4707:MET:HG3	1.88	0.55
2:B:2585:MET:HE3	2:B:2585:MET:N	2.21	0.55
2:C:2126:ILE:HG12	2:C:2142:MET:SD	2.46	0.55
2:C:3601:ALA:O	2:C:3605:MET:CB	2.55	0.55
3:L:82:SER:HA	3:L:85:GLU:HB3	1.88	0.55
2:A:2982:PHE:O	2:A:3001:LYS:NZ	2.40	0.55
2:D:3601:ALA:O	2:D:3605:MET:CB	2.55	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:1843:LEU:HD23	2:B:1846:ILE:HD12	1.88	0.55
2:B:2939:TYR:O	2:B:2943:PHE:HD1	1.89	0.55
2:C:2481:GLN:NE2	2:C:2537:GLY:O	2.33	0.55
2:C:2701:PHE:CE2	2:C:2703:PRO:HG3	2.41	0.55
2:A:3184:TYR:HD1	2:A:3192:ARG:NH2	2.05	0.55
2:A:3601:ALA:O	2:A:3605:MET:CB	2.55	0.55
3:I:82:SER:HA	3:I:85:GLU:HB3	1.88	0.55
2:A:1977:LEU:HD23	2:A:1979:PHE:HE2	1.72	0.55
2:A:2202:TYR:O	2:A:2206:ILE:HG12	2.05	0.55
2:A:2701:PHE:CE2	2:A:2703:PRO:HG3	2.41	0.55
2:A:3684:GLU:HG2	2:A:3689:MET:HE1	1.89	0.55
1:G:26:HIS:HB2	1:G:105:LEU:HD11	1.87	0.55
2:D:2238:THR:HG22	2:D:2240:LEU:H	1.72	0.55
2:B:3814:ALA:HA	2:B:3819:MET:HE2	1.87	0.55
2:C:2714:PRO:HD2	2:C:2717:LEU:HD12	1.87	0.55
2:D:780:GLU:OE2	2:D:1468:THR:OG1	2.21	0.55
2:D:2982:PHE:O	2:D:3001:LYS:NZ	2.40	0.55
2:D:3184:TYR:HD1	2:D:3192:ARG:NH2	2.05	0.55
2:B:4607:ALA:HB1	2:B:4649:VAL:HG21	1.89	0.55
2:A:2258:ARG:HB3	2:A:2260:PRO:HD2	1.89	0.55
1:F:75:LEU:HD22	1:F:102:VAL:HG21	1.88	0.55
2:D:1303:ARG:HA	2:D:1542:ALA:HA	1.87	0.55
2:D:2714:PRO:HD2	2:D:2717:LEU:HD12	1.87	0.55
2:B:393:MET:HA	2:B:393:MET:HE3	1.89	0.55
2:B:1790:LYS:O	2:B:1794:MET:HG3	2.06	0.55
2:B:3184:TYR:HD1	2:B:3192:ARG:NH2	2.05	0.55
2:C:878:LEU:HB3	2:C:940:LEU:HD23	1.89	0.55
2:C:1790:LYS:O	2:C:1794:MET:HG3	2.06	0.55
2:C:1977:LEU:HD23	2:C:1979:PHE:HE2	1.72	0.55
2:C:3684:GLU:HG2	2:C:3689:MET:HE1	1.88	0.55
2:A:964:MET:O	2:A:977:LYS:NZ	2.34	0.54
2:A:4607:ALA:HB1	2:A:4649:VAL:HG21	1.89	0.54
2:B:2982:PHE:O	2:B:3001:LYS:NZ	2.40	0.54
2:C:2258:ARG:HB3	2:C:2260:PRO:HD2	1.89	0.54
2:D:878:LEU:HB3	2:D:940:LEU:HD23	1.89	0.54
2:D:2275:GLN:OE1	2:D:2275:GLN:HA	2.08	0.54
2:D:2585:MET:HE3	2:D:2585:MET:N	2.21	0.54
2:B:3677:THR:O	2:B:3679:LYS:NZ	2.39	0.54
2:A:780:GLU:OE2	2:A:1468:THR:OG1	2.20	0.54
2:A:3890:TRP:O	2:B:76:ARG:NE	2.38	0.54
2:B:964:MET:O	2:B:977:LYS:NZ	2.34	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:456:LEU:O	2:C:460:ILE:HG13	2.08	0.54
2:A:456:LEU:O	2:A:460:ILE:HG13	2.07	0.54
2:A:878:LEU:HB3	2:A:940:LEU:HD23	1.89	0.54
2:A:2275:GLN:HA	2:A:2275:GLN:OE1	2.08	0.54
2:A:2570:GLU:HG2	2:A:2605:MET:HG3	1.90	0.54
2:D:3131:TYR:CE1	2:D:3166:PHE:CZ	2.93	0.54
2:D:4921:PHE:HE2	2:D:4940:VAL:HG11	1.72	0.54
2:B:2258:ARG:HB3	2:B:2260:PRO:HD2	1.89	0.54
2:B:3131:TYR:CE1	2:B:3166:PHE:CZ	2.93	0.54
2:C:4652:LYS:NZ	2:C:4945:GLN:OE1	2.25	0.54
1:H:75:LEU:HD22	1:H:102:VAL:HG21	1.88	0.54
2:A:393:MET:HA	2:A:393:MET:HE3	1.89	0.54
2:A:784:ILE:HG13	2:A:784:ILE:O	2.07	0.54
2:B:456:LEU:O	2:B:460:ILE:HG13	2.08	0.54
2:C:4607:ALA:HB1	2:C:4649:VAL:HG21	1.89	0.54
2:A:4660:PHE:CE1	2:D:4056:LYS:HB2	2.43	0.54
2:D:456:LEU:O	2:D:460:ILE:HG13	2.08	0.54
2:B:644:LEU:HD13	2:B:1630:LEU:HD21	1.90	0.54
2:B:4516:ILE:HG23	2:B:4568:MET:HE3	1.89	0.54
2:C:4516:ILE:HG23	2:C:4568:MET:HE3	1.89	0.54
2:A:2176:VAL:HG22	2:A:2220:TYR:CZ	2.43	0.54
2:A:3142:THR:HA	2:A:3233:HIS:NE2	2.23	0.54
2:A:4516:ILE:HG23	2:A:4568:MET:HE3	1.89	0.54
1:F:90:GLY:HA2	2:B:638:PRO:HD3	1.89	0.54
2:D:644:LEU:HD13	2:D:1630:LEU:HD21	1.90	0.54
2:D:2570:GLU:HG2	2:D:2605:MET:HG3	1.90	0.54
2:D:4607:ALA:HB1	2:D:4649:VAL:HG21	1.89	0.54
2:B:1977:LEU:HD23	2:B:1979:PHE:HE2	1.72	0.54
2:B:2176:VAL:HG22	2:B:2220:TYR:CZ	2.43	0.54
2:B:2275:GLN:OE1	2:B:2275:GLN:HA	2.08	0.54
2:B:2545:ILE:HG21	2:B:2584:MET:HE2	1.90	0.54
2:B:3945:VAL:HG23	2:B:4006:SER:HB3	1.89	0.54
2:A:2703:PRO:O	2:A:2854:LYS:HD3	2.06	0.54
2:A:4921:PHE:HE2	2:A:4940:VAL:HG11	1.72	0.54
2:D:76:ARG:HD3	2:C:3890:TRP:HB3	1.88	0.54
2:D:393:MET:HA	2:D:393:MET:HE3	1.89	0.54
2:D:3046:MET:HE1	2:D:3057:LEU:HD23	1.90	0.54
2:B:784:ILE:O	2:B:784:ILE:HG13	2.08	0.54
2:B:878:LEU:HB3	2:B:940:LEU:HD23	1.89	0.54
2:C:2570:GLU:HG2	2:C:2605:MET:HG3	1.90	0.54
2:C:2939:TYR:O	2:C:2943:PHE:HD1	1.89	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:3046:MET:HE1	2:C:3057:LEU:HD23	1.90	0.54
2:C:3945:VAL:HG23	2:C:4006:SER:HB3	1.89	0.54
3:K:82:SER:HA	3:K:85:GLU:HB3	1.88	0.54
2:A:2545:ILE:HG21	2:A:2584:MET:HE2	1.90	0.54
2:D:2725:ALA:CB	2:D:2760:TYR:HE1	2.21	0.54
2:D:4516:ILE:HG23	2:D:4568:MET:HE3	1.89	0.54
2:C:2344:LEU:HD22	2:C:2434:GLY:HA3	1.90	0.54
2:C:3184:TYR:HD1	2:C:3192:ARG:NH2	2.05	0.54
2:A:644:LEU:HD13	2:A:1630:LEU:HD21	1.90	0.54
2:A:2585:MET:HE3	2:A:2585:MET:N	2.21	0.54
2:A:3046:MET:HE1	2:A:3057:LEU:HD23	1.90	0.54
2:D:434:ASP:OD1	2:D:504:ARG:NE	2.40	0.54
2:B:3142:THR:HA	2:B:3233:HIS:NE2	2.23	0.54
2:B:3601:ALA:O	2:B:3605:MET:CB	2.55	0.54
2:D:890:HIS:CE1	2:D:924:LEU:HD22	2.43	0.53
2:D:2258:ARG:HB3	2:D:2260:PRO:HD2	1.89	0.53
2:B:472:HIS:O	2:B:476:GLN:HG2	2.08	0.53
2:B:2570:GLU:HG2	2:B:2605:MET:HG3	1.90	0.53
2:C:784:ILE:O	2:C:784:ILE:HG13	2.07	0.53
2:C:2725:ALA:CB	2:C:2760:TYR:HE1	2.21	0.53
2:A:3945:VAL:HG23	2:A:4006:SER:HB3	1.89	0.53
2:D:2344:LEU:HD22	2:D:2434:GLY:HA3	1.90	0.53
2:D:3684:GLU:HG2	2:D:3689:MET:HE1	1.89	0.53
2:B:3187:LYS:HB2	2:B:3192:ARG:NH1	2.24	0.53
2:C:2176:VAL:HG22	2:C:2220:TYR:CZ	2.43	0.53
2:C:2545:ILE:HG21	2:C:2584:MET:HE2	1.90	0.53
2:C:3120:ASP:HA	2:C:3123:LEU:HD21	1.90	0.53
2:C:3823:GLU:OE1	2:C:3827:GLU:N	2.41	0.53
2:A:472:HIS:O	2:A:476:GLN:HG2	2.08	0.53
2:D:2545:ILE:HG21	2:D:2584:MET:HE2	1.90	0.53
2:D:4046:ARG:HB3	2:D:4050:LYS:NZ	2.24	0.53
2:B:890:HIS:CE1	2:B:924:LEU:HD22	2.43	0.53
2:B:2657:TYR:HA	2:B:2662:PHE:CE2	2.44	0.53
2:B:3046:MET:HE1	2:B:3057:LEU:HD23	1.90	0.53
2:C:890:HIS:CE1	2:C:924:LEU:HD22	2.43	0.53
1:H:83:TYR:OH	2:D:1768:PHE:O	2.14	0.53
2:A:4521:LYS:HE2	2:A:4562:GLU:HB3	1.91	0.53
3:I:143:VAL:HA	3:I:146:MET:HE2	1.91	0.53
2:B:1549:SER:OG	2:B:1551:ASN:O	2.27	0.53
2:B:2344:LEU:HD22	2:B:2434:GLY:HA3	1.90	0.53
2:C:393:MET:HE3	2:C:393:MET:HA	1.89	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:3187:LYS:HB2	2:C:3192:ARG:NH1	2.24	0.53
2:C:4072:THR:HG22	2:C:4078:LEU:HB3	1.91	0.53
2:D:1549:SER:OG	2:D:1551:ASN:O	2.27	0.53
2:B:2725:ALA:CB	2:B:2760:TYR:HE1	2.21	0.53
2:B:4521:LYS:HE2	2:B:4562:GLU:HB3	1.91	0.53
2:C:472:HIS:O	2:C:476:GLN:HG2	2.08	0.53
2:C:1549:SER:OG	2:C:1551:ASN:O	2.27	0.53
2:C:2657:TYR:HA	2:C:2662:PHE:CE2	2.43	0.53
2:A:1549:SER:OG	2:A:1551:ASN:O	2.27	0.53
2:D:3120:ASP:HA	2:D:3123:LEU:HD21	1.90	0.53
2:D:4609:LYS:HD2	2:D:4615:LEU:HD22	1.91	0.53
3:J:143:VAL:HA	3:J:146:MET:HE2	1.91	0.53
2:A:890:HIS:CE1	2:A:924:LEU:HD22	2.43	0.53
2:A:2360:ASP:OD1	2:A:2385:GLY:N	2.41	0.53
2:A:2725:ALA:CB	2:A:2760:TYR:HE1	2.21	0.53
2:A:2923:TYR:CE1	2:A:3003:MET:HE1	2.44	0.53
2:A:4609:LYS:HD2	2:A:4615:LEU:HD22	1.91	0.53
2:A:4819:VAL:HG12	2:A:4830:GLU:HG3	1.91	0.53
2:D:2791:ARG:CZ	2:D:2795:GLY:HA3	2.39	0.53
2:D:3142:THR:HA	2:D:3233:HIS:NE2	2.23	0.53
2:B:4072:THR:HG22	2:B:4078:LEU:HB3	1.90	0.53
2:C:644:LEU:HD13	2:C:1630:LEU:HD21	1.90	0.53
2:C:3131:TYR:CE1	2:C:3166:PHE:CZ	2.93	0.53
3:L:143:VAL:HA	3:L:146:MET:HE2	1.91	0.53
2:A:558:LEU:HG	2:A:571:ILE:HG23	1.91	0.53
2:A:882:ARG:NH1	2:A:937:LEU:HD21	2.24	0.53
2:A:2657:TYR:HA	2:A:2662:PHE:CE2	2.43	0.53
2:A:3025:ASP:O	2:A:3029:ILE:HD12	2.09	0.53
2:D:784:ILE:HG13	2:D:784:ILE:O	2.08	0.53
2:C:2275:GLN:OE1	2:C:2275:GLN:HA	2.08	0.53
2:C:3142:THR:HA	2:C:3233:HIS:NE2	2.23	0.53
2:C:4609:LYS:HD2	2:C:4615:LEU:HD22	1.91	0.53
2:C:4819:VAL:HG12	2:C:4830:GLU:HG3	1.91	0.53
2:A:3030:VAL:O	2:A:3034:HIS:ND1	2.33	0.53
2:A:3105:LEU:O	2:A:3109:PHE:HD2	1.92	0.53
2:A:3187:LYS:HB2	2:A:3192:ARG:NH1	2.24	0.53
2:D:882:ARG:NH1	2:D:937:LEU:HD21	2.24	0.53
2:D:2923:TYR:CE1	2:D:3003:MET:HE1	2.44	0.53
2:D:3187:LYS:HB2	2:D:3192:ARG:NH1	2.24	0.53
2:D:3945:VAL:HG23	2:D:4006:SER:HB3	1.89	0.53
2:C:558:LEU:HG	2:C:571:ILE:HG23	1.91	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:4046:ARG:HB3	2:C:4050:LYS:NZ	2.24	0.53
3:K:33:LEU:HD11	3:K:53:ILE:HD11	1.91	0.53
2:A:11:ILE:HG23	2:A:13:PHE:CE2	2.39	0.52
2:A:995:MET:CE	2:A:1064:LEU:HD21	2.39	0.52
2:A:2824:ARG:HH21	2:B:1499:GLY:HA3	1.74	0.52
2:A:3120:ASP:HA	2:A:3123:LEU:HD21	1.90	0.52
2:A:4046:ARG:HB3	2:A:4050:LYS:NZ	2.24	0.52
2:D:2176:VAL:HG22	2:D:2220:TYR:CZ	2.43	0.52
2:B:2360:ASP:OD1	2:B:2385:GLY:N	2.41	0.52
2:B:3774:GLN:NE2	2:B:3845:LEU:O	2.42	0.52
2:C:995:MET:CE	2:C:1064:LEU:HD21	2.40	0.52
2:B:164:PRO:HB3	2:B:169:ARG:HB2	1.91	0.52
2:B:882:ARG:NH1	2:B:937:LEU:HD21	2.24	0.52
2:B:995:MET:CE	2:B:1064:LEU:HD21	2.39	0.52
2:C:882:ARG:NH1	2:C:937:LEU:HD21	2.24	0.52
3:K:143:VAL:HA	3:K:146:MET:HE2	1.91	0.52
2:D:1979:PHE:CE1	2:D:1993:ARG:HG2	2.44	0.52
2:D:3025:ASP:O	2:D:3029:ILE:HD12	2.09	0.52
2:D:3119:GLU:OE2	2:D:3248:ARG:NH2	2.43	0.52
2:D:3823:GLU:OE1	2:D:3827:GLU:N	2.41	0.52
2:D:4521:LYS:HE2	2:D:4562:GLU:HB3	1.91	0.52
2:D:4819:VAL:HG12	2:D:4830:GLU:HG3	1.91	0.52
2:B:558:LEU:HG	2:B:571:ILE:HG23	1.92	0.52
2:B:1979:PHE:CE1	2:B:1993:ARG:HG2	2.44	0.52
2:A:164:PRO:HB3	2:A:169:ARG:HB2	1.91	0.52
2:A:2344:LEU:HD22	2:A:2434:GLY:HA3	1.90	0.52
2:A:4072:THR:HG22	2:A:4078:LEU:HB3	1.91	0.52
2:D:558:LEU:HG	2:D:571:ILE:HG23	1.91	0.52
2:D:3105:LEU:O	2:D:3109:PHE:HD2	1.92	0.52
2:D:4139:MET:HE3	2:D:4143:LYS:HA	1.92	0.52
2:B:4819:VAL:HG12	2:B:4830:GLU:HG3	1.91	0.52
2:B:4921:PHE:HE2	2:B:4940:VAL:HG11	1.72	0.52
2:C:2791:ARG:CZ	2:C:2795:GLY:HA3	2.39	0.52
2:C:2923:TYR:CE1	2:C:3003:MET:HE1	2.44	0.52
2:A:2791:ARG:CZ	2:A:2795:GLY:HA3	2.39	0.52
2:D:1435:GLY:H	2:D:1500:ARG:HH21	1.58	0.52
2:B:434:ASP:OD1	2:B:504:ARG:NE	2.40	0.52
2:B:2642:ARG:NH2	2:B:2682:GLU:OE1	2.43	0.52
2:B:3025:ASP:O	2:B:3029:ILE:HD12	2.09	0.52
2:B:3796:LEU:HD22	2:B:3835:PHE:HZ	1.75	0.52
2:B:4609:LYS:HD2	2:B:4615:LEU:HD22	1.91	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:2882:LYS:HD2	2:C:2886:ARG:NH1	2.25	0.52
3:L:33:LEU:HD11	3:L:53:ILE:HD11	1.91	0.52
2:A:27:THR:OG1	2:A:32:GLN:OE1	2.28	0.52
2:A:1435:GLY:H	2:A:1500:ARG:HH21	1.58	0.52
2:A:2273:GLY:O	2:A:2336:ARG:NH2	2.42	0.52
2:D:472:HIS:O	2:D:476:GLN:HG2	2.08	0.52
2:D:995:MET:CE	2:D:1064:LEU:HD21	2.40	0.52
2:B:3074:ASN:HB2	2:B:3090:VAL:HG22	1.91	0.52
2:C:3729:ALA:HA	2:C:3732:HIS:CD2	2.45	0.52
2:C:4139:MET:HE3	2:C:4143:LYS:HA	1.92	0.52
2:A:3823:GLU:OE1	2:A:3827:GLU:N	2.41	0.52
2:D:11:ILE:HG23	2:D:13:PHE:CE2	2.39	0.52
2:D:2984:SER:OG	2:D:2994:GLY:O	2.27	0.52
2:D:4714:PHE:CD1	2:C:4294:LEU:HD12	2.45	0.52
2:C:888:ASN:HA	2:C:891:GLU:OE1	2.10	0.52
2:C:1435:GLY:H	2:C:1500:ARG:HH21	1.58	0.52
2:C:3174:HIS:ND1	2:C:3175:LEU:HG	2.25	0.52
2:A:3054:LYS:HB3	2:A:3058:ARG:NH2	2.25	0.52
2:A:3152:ARG:HH22	2:A:3233:HIS:CD2	2.28	0.52
2:A:4139:MET:HE3	2:A:4143:LYS:HA	1.92	0.52
2:D:2657:TYR:HA	2:D:2662:PHE:CE2	2.43	0.52
2:D:3152:ARG:HH22	2:D:3233:HIS:CD2	2.28	0.52
2:B:2681:MET:HE3	2:B:2682:GLU:N	2.25	0.52
2:B:3823:GLU:OE1	2:B:3827:GLU:N	2.41	0.52
2:C:3025:ASP:O	2:C:3029:ILE:HD12	2.09	0.52
2:A:888:ASN:HA	2:A:891:GLU:OE1	2.10	0.52
2:A:1979:PHE:CE1	2:A:1993:ARG:HG2	2.44	0.52
2:A:3774:GLN:NE2	2:A:3845:LEU:O	2.42	0.52
2:D:3074:ASN:HB2	2:D:3090:VAL:HG22	1.91	0.52
2:B:1435:GLY:H	2:B:1500:ARG:HH21	1.58	0.52
2:B:3120:ASP:HA	2:B:3123:LEU:HD21	1.90	0.52
2:B:3152:ARG:HH22	2:B:3233:HIS:CD2	2.28	0.52
2:B:4139:MET:HE3	2:B:4143:LYS:HA	1.92	0.52
2:C:11:ILE:HG23	2:C:13:PHE:CE2	2.39	0.52
2:C:164:PRO:HB3	2:C:169:ARG:HB2	1.91	0.52
2:A:2770:ILE:HG13	2:A:2771:TYR:CD1	2.44	0.52
2:D:3729:ALA:HA	2:D:3732:HIS:CD2	2.45	0.52
2:D:4072:THR:HG22	2:D:4078:LEU:HB3	1.91	0.52
2:B:11:ILE:HG23	2:B:13:PHE:CE2	2.39	0.52
2:B:506:HIS:NE2	2:B:534:TYR:OH	2.40	0.52
2:B:2791:ARG:CZ	2:B:2795:GLY:HA3	2.39	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:2882:LYS:HD2	2:B:2886:ARG:NH1	2.25	0.52
2:B:2923:TYR:CE1	2:B:3003:MET:HE1	2.44	0.52
2:B:3054:LYS:HB3	2:B:3058:ARG:HH22	1.75	0.52
2:B:4046:ARG:HB3	2:B:4050:LYS:NZ	2.24	0.52
2:C:1979:PHE:CE1	2:C:1993:ARG:HG2	2.44	0.52
2:C:2273:GLY:O	2:C:2336:ARG:NH2	2.42	0.52
2:C:2717:LEU:O	2:C:2721:ILE:HG13	2.10	0.52
2:C:3218:ILE:HD11	2:C:3239:LEU:HD21	1.92	0.52
2:A:434:ASP:OD1	2:A:504:ARG:NE	2.40	0.51
2:A:3174:HIS:ND1	2:A:3175:LEU:HG	2.25	0.51
2:A:3796:LEU:HD22	2:A:3835:PHE:HZ	1.75	0.51
3:I:33:LEU:HD11	3:I:53:ILE:HD11	1.91	0.51
2:D:3054:LYS:HB3	2:D:3058:ARG:NH2	2.25	0.51
2:B:2681:MET:HE3	2:B:2682:GLU:H	1.75	0.51
2:B:2984:SER:OG	2:B:2994:GLY:O	2.27	0.51
2:B:3054:LYS:HB3	2:B:3058:ARG:NH2	2.25	0.51
2:B:3105:LEU:O	2:B:3109:PHE:HD2	1.92	0.51
2:B:3174:HIS:ND1	2:B:3175:LEU:HG	2.25	0.51
2:C:2770:ILE:HG13	2:C:2771:TYR:CD1	2.44	0.51
2:C:3105:LEU:O	2:C:3109:PHE:HD2	1.93	0.51
2:C:4521:LYS:HE2	2:C:4562:GLU:HB3	1.91	0.51
2:C:4921:PHE:HE2	2:C:4940:VAL:HG11	1.73	0.51
3:K:1:MET:HA	3:K:1:MET:CE	2.40	0.51
3:L:33:LEU:O	3:L:36:VAL:HG22	2.10	0.51
2:A:638:PRO:HD3	1:E:90:GLY:HA2	1.91	0.51
2:A:2642:ARG:NH2	2:A:2682:GLU:OE1	2.43	0.51
2:A:3119:GLU:OE2	2:A:3248:ARG:NH2	2.43	0.51
2:A:3729:ALA:HA	2:A:3732:HIS:CD2	2.45	0.51
3:I:1:MET:HA	3:I:1:MET:CE	2.40	0.51
2:D:27:THR:OG1	2:D:32:GLN:OE1	2.28	0.51
2:D:3218:ILE:HD11	2:D:3239:LEU:HD21	1.92	0.51
2:D:3774:GLN:NE2	2:D:3845:LEU:O	2.42	0.51
2:B:2717:LEU:O	2:B:2721:ILE:HG13	2.10	0.51
2:B:3119:GLU:OE2	2:B:3248:ARG:NH2	2.43	0.51
3:K:33:LEU:O	3:K:36:VAL:HG22	2.11	0.51
2:A:541:ILE:HG22	2:A:547:ASN:HB3	1.92	0.51
2:A:2681:MET:HE3	2:A:2682:GLU:H	1.75	0.51
2:A:3054:LYS:HB3	2:A:3058:ARG:HH22	1.75	0.51
2:A:3074:ASN:HB2	2:A:3090:VAL:HG22	1.91	0.51
3:I:33:LEU:O	3:I:36:VAL:HG22	2.10	0.51
2:D:888:ASN:HA	2:D:891:GLU:OE1	2.10	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:2770:ILE:HG13	2:D:2771:TYR:CD1	2.44	0.51
2:B:27:THR:OG1	2:B:32:GLN:OE1	2.28	0.51
2:B:2787:TRP:CZ2	2:B:2840:MET:HE3	2.45	0.51
2:C:27:THR:OG1	2:C:32:GLN:OE1	2.28	0.51
2:C:2214:MET:HA	2:C:2214:MET:HE3	1.92	0.51
2:C:2642:ARG:NH2	2:C:2682:GLU:OE1	2.43	0.51
2:C:2787:TRP:CZ2	2:C:2840:MET:HE3	2.45	0.51
2:C:3054:LYS:HB3	2:C:3058:ARG:NH2	2.25	0.51
2:C:3074:ASN:HB2	2:C:3090:VAL:HG22	1.91	0.51
2:C:3119:GLU:OE2	2:C:3248:ARG:NH2	2.43	0.51
2:A:2681:MET:HE3	2:A:2682:GLU:N	2.25	0.51
2:D:541:ILE:HG22	2:D:547:ASN:HB3	1.92	0.51
2:D:2787:TRP:CZ2	2:D:2840:MET:HE3	2.45	0.51
2:B:191:TYR:N	2:B:206:ALA:O	2.44	0.51
2:C:3796:LEU:HD22	2:C:3835:PHE:HZ	1.75	0.51
2:A:2703:PRO:HB2	2:A:2854:LYS:CD	2.40	0.51
1:E:78:THR:OG1	1:E:80:ASP:OD1	2.24	0.51
2:D:506:HIS:NE2	2:D:534:TYR:OH	2.40	0.51
2:D:942:THR:O	2:D:946:LEU:HG	2.10	0.51
2:D:2681:MET:HE3	2:D:2682:GLU:H	1.75	0.51
2:D:3054:LYS:HB3	2:D:3058:ARG:HH22	1.75	0.51
2:D:3174:HIS:ND1	2:D:3175:LEU:HG	2.25	0.51
2:B:2273:GLY:O	2:B:2336:ARG:NH2	2.42	0.51
2:C:2681:MET:HE3	2:C:2682:GLU:N	2.25	0.51
2:C:3054:LYS:HB3	2:C:3058:ARG:HH22	1.75	0.51
3:J:33:LEU:O	3:J:36:VAL:HG22	2.11	0.51
3:J:33:LEU:HD11	3:J:53:ILE:HD11	1.91	0.51
2:A:2666:LEU:HD11	2:A:2969:PRO:HB2	1.92	0.51
2:A:4194:GLU:CD	2:A:4608:ARG:HH22	2.19	0.51
2:A:4809:MET:HG2	2:D:4517:LEU:O	2.10	0.51
2:D:1508:GLY:N	2:D:1521:ILE:O	2.44	0.51
2:B:942:THR:O	2:B:946:LEU:HG	2.10	0.51
2:B:2055:SER:HB3	2:B:2060:GLN:HB2	1.93	0.51
2:B:2279:MET:O	2:B:2283:LYS:HG3	2.11	0.51
2:B:4183:LYS:HB2	2:B:4183:LYS:HZ2	1.74	0.51
2:C:152:ASP:OD2	2:C:154:THR:OG1	2.25	0.51
2:C:191:TYR:N	2:C:206:ALA:O	2.44	0.51
2:A:191:TYR:N	2:A:206:ALA:O	2.44	0.51
2:A:3068:LEU:HD21	2:A:3136:SER:OG	2.11	0.51
2:A:4867:ILE:HG12	2:B:4864:GLY:HA2	1.92	0.51
2:A:4867:ILE:HD13	2:B:4867:ILE:HD12	1.93	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:164:PRO:HB3	2:D:169:ARG:HB2	1.91	0.51
2:D:915:HIS:CE1	2:D:917:CYS:HG	2.28	0.51
2:D:3796:LEU:HD22	2:D:3835:PHE:HZ	1.75	0.51
2:B:3729:ALA:HA	2:B:3732:HIS:CD2	2.45	0.51
2:C:888:ASN:O	2:C:892:LEU:HD13	2.11	0.51
2:C:942:THR:O	2:C:946:LEU:HG	2.10	0.51
3:J:1:MET:HA	3:J:1:MET:CE	2.40	0.51
2:A:942:THR:O	2:A:946:LEU:HG	2.10	0.51
2:A:2440:PHE:CZ	2:A:2465:LYS:HE2	2.46	0.51
1:E:50:ARG:HB3	1:E:53:LYS:HE3	1.93	0.51
2:D:888:ASN:O	2:D:892:LEU:HD13	2.11	0.51
2:B:2770:ILE:HG13	2:B:2771:TYR:CD1	2.44	0.51
2:B:3068:LEU:HD21	2:B:3136:SER:OG	2.11	0.51
2:C:434:ASP:OD1	2:C:504:ARG:NE	2.40	0.51
2:C:3068:LEU:HD21	2:C:3136:SER:OG	2.11	0.51
2:C:3152:ARG:HH22	2:C:3233:HIS:CD2	2.28	0.51
2:D:191:TYR:N	2:D:206:ALA:O	2.44	0.51
2:D:4194:GLU:CD	2:D:4608:ARG:HH22	2.19	0.51
2:B:888:ASN:HA	2:B:891:GLU:OE1	2.10	0.51
2:A:888:ASN:O	2:A:892:LEU:HD13	2.11	0.51
2:A:2279:MET:O	2:A:2283:LYS:HG3	2.11	0.51
2:A:2984:SER:OG	2:A:2994:GLY:O	2.27	0.51
1:G:50:ARG:HB3	1:G:53:LYS:HE3	1.93	0.51
2:D:2681:MET:HE3	2:D:2682:GLU:N	2.25	0.51
2:D:3297:LYS:HD3	2:D:3334:VAL:HG13	1.93	0.51
2:B:3285:TYR:CE1	2:B:3322:LEU:HB2	2.46	0.51
2:C:541:ILE:HG22	2:C:547:ASN:HB3	1.92	0.51
2:C:1937:GLN:HG2	2:C:3609:TYR:HA	1.92	0.51
2:C:3297:LYS:HD3	2:C:3334:VAL:HG13	1.93	0.51
2:D:2642:ARG:NH2	2:D:2682:GLU:OE1	2.43	0.50
2:D:3902:GLY:O	2:D:3906:PHE:HD2	1.94	0.50
2:C:2681:MET:HE3	2:C:2682:GLU:H	1.75	0.50
2:A:2760:TYR:HD2	2:A:2760:TYR:O	1.94	0.50
2:A:3297:LYS:HD3	2:A:3334:VAL:HG13	1.93	0.50
1:G:78:THR:OG1	1:G:80:ASP:OD1	2.24	0.50
2:D:680:ASP:OD1	2:D:801:ARG:NH2	2.44	0.50
2:D:2214:MET:HA	2:D:2214:MET:HE3	1.92	0.50
2:D:2703:PRO:HB2	2:D:2854:LYS:CD	2.40	0.50
2:D:2717:LEU:O	2:D:2721:ILE:HG13	2.10	0.50
2:D:3285:TYR:CE1	2:D:3322:LEU:HB2	2.46	0.50
2:B:2440:PHE:CZ	2:B:2465:LYS:HE2	2.46	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:3650:GLU:HB2	2:B:3651:PRO:HD3	1.94	0.50
2:C:680:ASP:OD1	2:C:801:ARG:NH2	2.44	0.50
2:A:2659:GLN:C	2:A:2659:GLN:OE1	2.54	0.50
2:A:2717:LEU:O	2:A:2721:ILE:HG13	2.10	0.50
2:A:2833:LEU:HD23	2:A:2837:LEU:HD23	1.93	0.50
2:A:3255:GLU:OE2	2:A:3270:SER:N	2.45	0.50
2:A:3285:TYR:CE1	2:A:3322:LEU:HB2	2.46	0.50
2:A:3650:GLU:HB2	2:A:3651:PRO:HD3	1.93	0.50
2:B:3297:LYS:HD3	2:B:3334:VAL:HG13	1.93	0.50
2:C:706:TYR:CE1	2:C:1254:ARG:HD2	2.46	0.50
2:C:2055:SER:HB3	2:C:2060:GLN:HB2	1.93	0.50
2:C:2984:SER:OG	2:C:2994:GLY:O	2.27	0.50
3:L:1:MET:HA	3:L:1:MET:CE	2.40	0.50
2:A:680:ASP:OD1	2:A:801:ARG:NH2	2.44	0.50
2:A:2882:LYS:HD2	2:A:2886:ARG:NH1	2.25	0.50
2:A:3926:GLY:CA	2:A:4935:GLY:HA3	2.41	0.50
2:D:2659:GLN:C	2:D:2659:GLN:OE1	2.54	0.50
2:D:3068:LEU:HD21	2:D:3136:SER:OG	2.11	0.50
2:B:888:ASN:O	2:B:892:LEU:HD13	2.11	0.50
2:C:3902:GLY:O	2:C:3906:PHE:HD2	1.94	0.50
2:A:2214:MET:HA	2:A:2214:MET:HE3	1.92	0.50
2:A:2232:PRO:HG3	2:A:2382:ILE:HD11	1.94	0.50
2:A:2787:TRP:CZ2	2:A:2840:MET:HE3	2.45	0.50
2:D:3012:GLY:O	2:D:3016:ARG:HG2	2.12	0.50
2:D:4481:TRP:CE3	2:D:4484:ILE:HD11	2.47	0.50
2:C:2232:PRO:HG3	2:C:2382:ILE:HD11	1.94	0.50
2:C:2279:MET:O	2:C:2283:LYS:HG3	2.11	0.50
2:A:2055:SER:HB3	2:A:2060:GLN:HB2	1.93	0.50
2:A:3068:LEU:O	2:A:3072:MET:HG2	2.12	0.50
2:D:2273:GLY:O	2:D:2336:ARG:NH2	2.42	0.50
2:D:4035:TYR:HE1	2:D:4050:LYS:HB2	1.76	0.50
2:B:541:ILE:HG22	2:B:547:ASN:HB3	1.92	0.50
2:B:2582:PRO:HG3	2:B:2617:CYS:SG	2.52	0.50
2:B:2666:LEU:HD11	2:B:2969:PRO:HB2	1.92	0.50
2:B:2703:PRO:HB2	2:B:2854:LYS:CD	2.40	0.50
2:B:4194:GLU:CD	2:B:4608:ARG:HH22	2.19	0.50
2:B:4481:TRP:CE3	2:B:4484:ILE:HD11	2.47	0.50
2:C:3069:GLU:OE2	2:C:3136:SER:HB3	2.12	0.50
2:A:2582:PRO:HG3	2:A:2617:CYS:SG	2.52	0.50
2:D:3069:GLU:OE2	2:D:3136:SER:HB3	2.12	0.50
2:B:1937:GLN:HG2	2:B:3609:TYR:HA	1.92	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:2214:MET:HA	2:B:2214:MET:HE3	1.92	0.50
2:B:2659:GLN:OE1	2:B:2659:GLN:C	2.54	0.50
2:C:964:MET:HE2	2:C:980:PRO:HD2	1.93	0.50
2:A:4035:TYR:HE1	2:A:4050:LYS:HB2	1.76	0.50
2:A:4481:TRP:CE3	2:A:4484:ILE:HD11	2.47	0.50
2:D:1048:ASP:OD1	2:D:1049:SER:N	2.45	0.50
2:D:2440:PHE:CZ	2:D:2465:LYS:HE2	2.46	0.50
2:D:2760:TYR:O	2:D:2760:TYR:HD2	1.94	0.50
2:D:3255:GLU:OE2	2:D:3270:SER:N	2.45	0.50
2:B:804:LEU:HD13	2:B:832:LEU:HD21	1.94	0.50
2:B:964:MET:HE2	2:B:980:PRO:HD2	1.93	0.50
2:C:2760:TYR:HD2	2:C:2760:TYR:O	1.94	0.50
2:C:4194:GLU:CD	2:C:4608:ARG:HH22	2.19	0.50
1:H:50:ARG:HB3	1:H:53:LYS:HE3	1.93	0.50
2:A:1937:GLN:HG2	2:A:3609:TYR:HA	1.92	0.50
2:D:2087:LEU:O	2:D:2091:GLN:HG2	2.12	0.50
2:D:2758:LYS:HG3	2:D:2763:LEU:HD12	1.94	0.50
2:D:3068:LEU:O	2:D:3072:MET:HG2	2.12	0.50
2:B:2232:PRO:HG3	2:B:2382:ILE:HD11	1.94	0.50
2:B:2758:LYS:HG3	2:B:2763:LEU:HD12	1.94	0.50
2:B:3068:LEU:O	2:B:3072:MET:HG2	2.12	0.50
2:B:3134:LEU:HD12	2:B:3162:PHE:CE2	2.43	0.50
2:B:4035:TYR:HE1	2:B:4050:LYS:HB2	1.76	0.50
2:B:4070:ALA:HB1	2:B:4078:LEU:HD13	1.94	0.50
2:C:2582:PRO:HG3	2:C:2617:CYS:SG	2.52	0.50
2:C:3012:GLY:O	2:C:3016:ARG:HG2	2.12	0.50
2:A:706:TYR:CE1	2:A:1254:ARG:HD2	2.46	0.49
1:F:50:ARG:HB3	1:F:53:LYS:HE3	1.93	0.49
2:D:1499:GLY:HA3	2:C:2824:ARG:NH2	2.23	0.49
2:D:2232:PRO:HG3	2:D:2382:ILE:HD11	1.94	0.49
2:D:2666:LEU:HD11	2:D:2969:PRO:HB2	1.92	0.49
2:D:3608:LEU:HD12	2:D:3611:LEU:HD12	1.94	0.49
2:B:1508:GLY:N	2:B:1521:ILE:O	2.44	0.49
2:B:2760:TYR:O	2:B:2760:TYR:HD2	1.94	0.49
2:B:3255:GLU:OE2	2:B:3270:SER:N	2.45	0.49
2:B:3608:LEU:HD12	2:B:3611:LEU:HD12	1.94	0.49
2:C:1048:ASP:OD1	2:C:1049:SER:N	2.45	0.49
2:C:2087:LEU:O	2:C:2091:GLN:HG2	2.12	0.49
2:C:2833:LEU:HD23	2:C:2837:LEU:HD23	1.93	0.49
2:C:3650:GLU:HB2	2:C:3651:PRO:HD3	1.94	0.49
2:C:4481:TRP:CE3	2:C:4484:ILE:HD11	2.47	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:506:HIS:NE2	2:A:534:TYR:OH	2.40	0.49
2:A:964:MET:HE2	2:A:980:PRO:HD2	1.93	0.49
2:A:3218:ILE:HD11	2:A:3239:LEU:HD21	1.92	0.49
2:D:2055:SER:HB3	2:D:2060:GLN:HB2	1.93	0.49
2:B:2833:LEU:HD23	2:B:2837:LEU:HD23	1.93	0.49
2:B:2920:ARG:HG2	2:B:2923:TYR:HB2	1.95	0.49
2:B:3012:GLY:O	2:B:3016:ARG:HG2	2.12	0.49
2:B:3218:ILE:HD11	2:B:3239:LEU:HD21	1.92	0.49
2:C:804:LEU:HD13	2:C:832:LEU:HD21	1.94	0.49
2:C:2440:PHE:CZ	2:C:2465:LYS:HE2	2.46	0.49
2:A:3012:GLY:O	2:A:3016:ARG:HG2	2.12	0.49
2:D:706:TYR:CE1	2:D:1254:ARG:HD2	2.46	0.49
2:D:1937:GLN:HG2	2:D:3609:TYR:HA	1.92	0.49
2:D:3650:GLU:HB2	2:D:3651:PRO:HD3	1.94	0.49
2:B:1919:ARG:HA	2:B:1922:ILE:HG22	1.94	0.49
2:C:2585:MET:H	2:C:2585:MET:CE	2.22	0.49
2:C:2659:GLN:C	2:C:2659:GLN:OE1	2.54	0.49
2:C:2736:LYS:HB2	2:C:2741:TRP:CG	2.47	0.49
2:C:3285:TYR:CE1	2:C:3322:LEU:HB2	2.46	0.49
2:C:3608:LEU:HD12	2:C:3611:LEU:HD12	1.94	0.49
2:A:1272:ARG:NH2	2:A:1582:CYS:SG	2.86	0.49
2:A:2920:ARG:HG2	2:A:2923:TYR:HB2	1.95	0.49
2:D:2279:MET:O	2:D:2283:LYS:HG3	2.11	0.49
2:D:2882:LYS:HD2	2:D:2886:ARG:NH1	2.25	0.49
2:D:3012:GLY:HA2	2:D:3015:VAL:HG12	1.93	0.49
2:D:3926:GLY:CA	2:D:4935:GLY:HA3	2.41	0.49
2:B:3902:GLY:O	2:B:3906:PHE:HD2	1.94	0.49
2:C:4035:TYR:HE1	2:C:4050:LYS:HB2	1.76	0.49
2:A:152:ASP:OD2	2:A:154:THR:OG1	2.25	0.49
2:A:882:ARG:HH11	2:A:937:LEU:HD21	1.78	0.49
2:A:4070:ALA:HB1	2:A:4078:LEU:HD13	1.94	0.49
2:D:2582:PRO:HG3	2:D:2617:CYS:SG	2.52	0.49
2:B:706:TYR:CE1	2:B:1254:ARG:HD2	2.46	0.49
2:B:1138:ASP:HB3	2:B:1143:GLN:HB2	1.95	0.49
2:B:3221:LEU:HD11	2:B:3226:ILE:HG12	1.95	0.49
2:C:1272:ARG:NH2	2:C:1582:CYS:SG	2.86	0.49
2:C:1919:ARG:HA	2:C:1922:ILE:HG22	1.94	0.49
2:C:2666:LEU:HD11	2:C:2969:PRO:HB2	1.92	0.49
2:C:3255:GLU:OE2	2:C:3270:SER:N	2.45	0.49
2:C:3774:GLN:NE2	2:C:3845:LEU:O	2.42	0.49
2:A:1048:ASP:OD1	2:A:1049:SER:N	2.45	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:1089:ARG:HB3	2:A:1204:VAL:HG23	1.95	0.49
2:A:2758:LYS:HG3	2:A:2763:LEU:HD12	1.94	0.49
2:A:3304:GLN:HB3	2:A:3305:PRO:HD3	1.95	0.49
2:A:3902:GLY:O	2:A:3906:PHE:HD2	1.94	0.49
2:D:152:ASP:OD2	2:D:154:THR:OG1	2.25	0.49
2:D:251:GLU:HB2	2:D:256:GLN:HE21	1.78	0.49
2:D:1089:ARG:HB3	2:D:1204:VAL:HG23	1.95	0.49
2:D:1138:ASP:HB3	2:D:1143:GLN:HB2	1.95	0.49
2:D:1272:ARG:NH2	2:D:1582:CYS:SG	2.86	0.49
2:D:2360:ASP:OD1	2:D:2385:GLY:N	2.41	0.49
2:D:2736:LYS:HB2	2:D:2741:TRP:CG	2.47	0.49
2:D:4652:LYS:NZ	2:D:4945:GLN:OE1	2.25	0.49
2:B:2087:LEU:O	2:B:2091:GLN:HG2	2.12	0.49
2:C:780:GLU:OE2	2:C:1468:THR:OG1	2.20	0.49
2:C:2627:TRP:CB	2:C:2630:PHE:HB2	2.43	0.49
2:C:2703:PRO:HB2	2:C:2854:LYS:CD	2.40	0.49
2:C:2920:ARG:HG2	2:C:2923:TYR:HB2	1.94	0.49
2:C:3068:LEU:O	2:C:3072:MET:HG2	2.12	0.49
2:C:3221:LEU:HD11	2:C:3226:ILE:HG12	1.95	0.49
2:A:4268:MET:HA	2:A:4271:VAL:HG12	1.95	0.49
2:B:3183:ILE:C	2:B:3192:ARG:HH22	2.21	0.49
1:H:12:ASP:OD1	1:H:13:GLY:N	2.46	0.49
2:A:364:GLN:NE2	2:A:369:GLY:O	2.45	0.49
2:A:1508:GLY:N	2:A:1521:ILE:O	2.44	0.49
2:A:3296:MET:HE3	2:A:3334:VAL:HG11	1.95	0.49
2:A:3641:ILE:HD12	2:A:3695:MET:HG2	1.95	0.49
1:F:12:ASP:OD1	1:F:13:GLY:N	2.46	0.49
2:D:1549:SER:HB2	2:C:2830:ASN:OD1	2.13	0.49
2:D:1895:GLN:NE2	2:D:2068:ARG:HH22	2.11	0.49
2:D:1966:ARG:NH1	3:L:111:THR:OG1	2.46	0.49
2:B:1048:ASP:OD1	2:B:1049:SER:N	2.45	0.49
2:B:2736:LYS:HB2	2:B:2741:TRP:CG	2.47	0.49
2:C:251:GLU:HB2	2:C:256:GLN:HE21	1.78	0.49
2:C:1138:ASP:HB3	2:C:1143:GLN:HB2	1.95	0.49
2:C:3012:GLY:HA2	2:C:3015:VAL:HG12	1.93	0.49
2:A:804:LEU:HD13	2:A:832:LEU:HD21	1.94	0.49
2:B:1272:ARG:NH2	2:B:1582:CYS:SG	2.86	0.49
2:B:1962:THR:HG23	2:B:1966:ARG:HH21	1.77	0.49
2:B:3012:GLY:HA2	2:B:3015:VAL:HG12	1.93	0.49
2:C:2928:GLN:O	2:C:2932:TYR:HD2	1.96	0.49
2:C:3296:MET:HE3	2:C:3334:VAL:HG11	1.95	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:3069:GLU:OE2	2:A:3136:SER:HB3	2.12	0.49
2:D:804:LEU:HD13	2:D:832:LEU:HD21	1.94	0.49
2:D:964:MET:HE2	2:D:980:PRO:HD2	1.93	0.49
2:D:4252:ILE:O	2:D:4256:MET:HG3	2.13	0.49
2:C:1895:GLN:NE2	2:C:2068:ARG:HH22	2.11	0.49
2:C:3183:ILE:C	2:C:3192:ARG:HH22	2.21	0.49
2:C:3269:ASN:O	2:C:3272:HIS:N	2.46	0.49
2:C:4070:ALA:HB1	2:C:4078:LEU:HD13	1.94	0.49
2:C:4183:LYS:HB2	2:C:4183:LYS:HZ3	1.73	0.49
2:A:2736:LYS:HB2	2:A:2741:TRP:CG	2.47	0.48
2:A:2830:ASN:O	2:B:1549:SER:HB2	2.13	0.48
2:A:3183:ILE:C	2:A:3192:ARG:HH22	2.21	0.48
2:A:3608:LEU:HD12	2:A:3611:LEU:HD12	1.94	0.48
2:A:4183:LYS:HB2	2:A:4183:LYS:HZ3	1.76	0.48
1:G:12:ASP:OD1	1:G:13:GLY:N	2.46	0.48
2:D:2920:ARG:HG2	2:D:2923:TYR:HB2	1.95	0.48
2:D:2928:GLN:O	2:D:2932:TYR:HD2	1.96	0.48
2:B:2497:ARG:HD3	2:B:2876:THR:HG22	1.95	0.48
2:B:2928:GLN:O	2:B:2932:TYR:HD2	1.96	0.48
2:B:3043:ARG:O	2:B:3047:LYS:HG2	2.13	0.48
2:B:3122:ILE:HG23	2:B:3126:VAL:HG12	1.95	0.48
2:A:1895:GLN:NE2	2:A:2068:ARG:HH22	2.11	0.48
2:A:4252:ILE:O	2:A:4256:MET:HG3	2.13	0.48
2:D:1919:ARG:HA	2:D:1922:ILE:HG22	1.94	0.48
2:D:2833:LEU:HD23	2:D:2837:LEU:HD23	1.93	0.48
2:D:3641:ILE:HD12	2:D:3695:MET:HG2	1.95	0.48
2:D:4070:ALA:HB1	2:D:4078:LEU:HD13	1.94	0.48
2:B:4268:MET:HA	2:B:4271:VAL:HG12	1.95	0.48
2:C:1508:GLY:N	2:C:1521:ILE:O	2.44	0.48
2:C:2497:ARG:HD3	2:C:2876:THR:HG22	1.95	0.48
2:A:1962:THR:HG23	2:A:1966:ARG:HH21	1.78	0.48
2:D:1962:THR:HG23	2:D:1966:ARG:HH21	1.77	0.48
2:D:2882:LYS:HB3	2:D:2886:ARG:NH1	2.29	0.48
2:D:3122:ILE:HG23	2:D:3126:VAL:HG12	1.95	0.48
2:D:3304:GLN:HB3	2:D:3305:PRO:HD3	1.95	0.48
2:D:4797:GLU:N	2:D:4797:GLU:OE1	2.46	0.48
2:C:1829:LEU:HD11	2:C:1839:LEU:HD13	1.95	0.48
2:C:2279:MET:HE3	2:C:2279:MET:HB3	1.78	0.48
2:C:2758:LYS:HG3	2:C:2763:LEU:HD12	1.94	0.48
2:A:988:LEU:HD21	2:A:1055:ARG:HG3	1.96	0.48
2:A:1919:ARG:HA	2:A:1922:ILE:HG22	1.94	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:2087:LEU:O	2:A:2091:GLN:HG2	2.12	0.48
2:A:2882:LYS:HB3	2:A:2886:ARG:NH1	2.29	0.48
2:A:3012:GLY:HA2	2:A:3015:VAL:HG12	1.93	0.48
2:A:4660:PHE:HE1	2:D:4056:LYS:HB2	1.78	0.48
2:D:1829:LEU:HD11	2:D:1839:LEU:HD13	1.95	0.48
2:D:3183:ILE:C	2:D:3192:ARG:HH22	2.21	0.48
2:D:3296:MET:HE3	2:D:3334:VAL:HG11	1.95	0.48
2:B:1689:ILE:HA	2:B:1703:TYR:HE1	1.79	0.48
2:B:1829:LEU:HD11	2:B:1839:LEU:HD13	1.95	0.48
2:B:1895:GLN:NE2	2:B:2068:ARG:HH22	2.11	0.48
2:B:3069:GLU:OE2	2:B:3136:SER:HB3	2.12	0.48
2:B:3304:GLN:HB3	2:B:3305:PRO:HD3	1.95	0.48
2:D:882:ARG:HH11	2:D:937:LEU:HD21	1.77	0.48
2:D:3043:ARG:O	2:D:3047:LYS:HG2	2.13	0.48
2:D:3221:LEU:HD11	2:D:3226:ILE:HG12	1.95	0.48
2:D:3815:GLU:HG2	2:D:3821:THR:HG22	1.96	0.48
2:D:4620:GLN:OE1	2:D:4632:ARG:NH2	2.35	0.48
2:B:3641:ILE:HD12	2:B:3695:MET:HG2	1.95	0.48
2:C:988:LEU:HD21	2:C:1055:ARG:HG3	1.95	0.48
2:C:1977:LEU:HD21	2:C:3620:PHE:HE1	1.78	0.48
2:C:3304:GLN:HB3	2:C:3305:PRO:HD3	1.95	0.48
2:C:3641:ILE:HD12	2:C:3695:MET:HG2	1.95	0.48
2:A:1689:ILE:HA	2:A:1703:TYR:HE1	1.79	0.48
2:A:1829:LEU:HD11	2:A:1839:LEU:HD13	1.95	0.48
2:A:4495:PHE:HE2	2:D:4283:PHE:HE2	1.62	0.48
1:E:12:ASP:OD1	1:E:13:GLY:N	2.46	0.48
2:D:988:LEU:HD21	2:D:1055:ARG:HG3	1.96	0.48
2:D:1977:LEU:HD21	2:D:3620:PHE:HE1	1.78	0.48
2:B:882:ARG:HH11	2:B:937:LEU:HD21	1.78	0.48
2:B:1644:LEU:HD23	2:B:1651:LEU:HA	1.95	0.48
2:B:3296:MET:HE3	2:B:3334:VAL:HG11	1.95	0.48
2:A:1895:GLN:OE1	2:A:2068:ARG:NH1	2.46	0.48
2:A:2596:VAL:HG21	2:A:2610:LEU:HD11	1.96	0.48
2:A:3595:ARG:CD	3:I:146:MET:HG3	2.43	0.48
2:D:934:GLN:O	2:D:938:GLU:OE1	2.32	0.48
2:D:3269:ASN:O	2:D:3272:HIS:N	2.46	0.48
2:D:4268:MET:HA	2:D:4271:VAL:HG12	1.95	0.48
2:B:1089:ARG:HB3	2:B:1204:VAL:HG23	1.95	0.48
2:B:3926:GLY:CA	2:B:4935:GLY:HA3	2.41	0.48
2:C:249:SER:OG	2:C:250:GLY:N	2.47	0.48
2:C:668:ALA:HB2	2:C:1012:ILE:HD11	1.96	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:882:ARG:HH11	2:C:937:LEU:HD21	1.78	0.48
2:C:2743:TYR:HD1	2:C:2757:MET:HE2	1.78	0.48
2:C:2773:TRP:HB3	2:C:2774:PRO:HD3	1.96	0.48
2:A:251:GLU:HB2	2:A:256:GLN:HE21	1.78	0.48
2:A:2743:TYR:HD1	2:A:2757:MET:HE2	1.78	0.48
2:A:2928:GLN:O	2:A:2932:TYR:HD2	1.96	0.48
1:E:50:ARG:NH1	1:E:53:LYS:HD2	2.29	0.48
2:D:2585:MET:H	2:D:2585:MET:CE	2.22	0.48
2:B:934:GLN:O	2:B:938:GLU:OE1	2.32	0.48
2:C:3189:SER:HA	2:C:3192:ARG:HB2	1.96	0.48
2:A:888:ASN:O	2:A:891:GLU:HB2	2.14	0.48
2:A:1138:ASP:HB3	2:A:1143:GLN:HB2	1.95	0.48
2:D:1644:LEU:HD23	2:D:1651:LEU:HA	1.95	0.48
2:D:2760:TYR:OH	2:D:2772:ARG:NH2	2.29	0.48
2:D:2773:TRP:HB3	2:D:2774:PRO:HD3	1.96	0.48
2:B:152:ASP:OD2	2:B:154:THR:OG1	2.25	0.48
2:B:249:SER:OG	2:B:250:GLY:N	2.47	0.48
2:B:251:GLU:HB2	2:B:256:GLN:HE21	1.78	0.48
2:B:850:LEU:HD21	2:B:1249:MET:HE1	1.96	0.48
2:B:988:LEU:HD21	2:B:1055:ARG:HG3	1.96	0.48
2:B:2596:VAL:HG21	2:B:2610:LEU:HD11	1.96	0.48
2:B:3189:SER:HA	2:B:3192:ARG:HB2	1.96	0.48
2:B:3269:ASN:O	2:B:3272:HIS:N	2.46	0.48
2:B:3281:LEU:HB3	2:B:3285:TYR:CZ	2.49	0.48
2:B:4044:SER:OG	2:B:4045:LYS:N	2.47	0.48
2:C:1962:THR:HG23	2:C:1966:ARG:HH21	1.78	0.48
2:C:3815:GLU:HG2	2:C:3821:THR:HG22	1.96	0.48
2:C:4252:ILE:O	2:C:4256:MET:HG3	2.13	0.48
2:A:1644:LEU:HD23	2:A:1651:LEU:HA	1.95	0.48
2:A:3043:ARG:O	2:A:3047:LYS:HG2	2.13	0.48
2:A:3122:ILE:HG23	2:A:3126:VAL:HG12	1.95	0.48
2:A:3189:SER:HA	2:A:3192:ARG:HB2	1.96	0.48
2:A:3221:LEU:HD11	2:A:3226:ILE:HG12	1.95	0.48
1:G:50:ARG:NH1	1:G:53:LYS:HD2	2.29	0.48
2:D:364:GLN:NE2	2:D:369:GLY:O	2.45	0.48
2:D:966:LEU:HB2	2:D:978:PRO:HB2	1.96	0.48
2:D:2743:TYR:HD1	2:D:2757:MET:HE2	1.78	0.48
2:D:4807:ASP:O	2:C:4522:VAL:HG12	2.14	0.48
2:B:895:MET:HA	2:B:898:ILE:HG22	1.96	0.48
2:B:2054:LYS:NZ	2:B:2056:SER:OG	2.34	0.48
2:C:3281:LEU:HB3	2:C:3285:TYR:CZ	2.49	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:4268:MET:HA	2:C:4271:VAL:HG12	1.95	0.48
1:E:58:LYS:HB3	1:E:81:VAL:HB	1.96	0.47
1:F:78:THR:OG1	1:F:80:ASP:OD1	2.24	0.47
2:D:850:LEU:HD21	2:D:1249:MET:HE1	1.96	0.47
2:D:3060:PHE:HZ	2:D:3104:MET:HE1	1.79	0.47
2:B:668:ALA:HB2	2:B:1012:ILE:HD11	1.96	0.47
2:B:680:ASP:OD1	2:B:801:ARG:NH2	2.44	0.47
2:B:4914:ASN:HB3	2:B:4917:ASN:HB2	1.96	0.47
2:C:3122:ILE:HG23	2:C:3126:VAL:HG12	1.95	0.47
2:A:934:GLN:O	2:A:938:GLU:OE1	2.32	0.47
2:A:2497:ARG:HD3	2:A:2876:THR:HG22	1.95	0.47
1:E:9:SER:HB2	1:E:72:ARG:HB3	1.97	0.47
2:D:3145:SER:O	2:D:3149:GLU:HG2	2.14	0.47
2:B:1977:LEU:HD21	2:B:3620:PHE:HE1	1.78	0.47
2:B:2882:LYS:HB3	2:B:2886:ARG:NH1	2.29	0.47
2:C:934:GLN:O	2:C:938:GLU:OE1	2.32	0.47
2:C:1089:ARG:HB3	2:C:1204:VAL:HG23	1.95	0.47
2:A:895:MET:HA	2:A:898:ILE:HG22	1.96	0.47
2:A:939:THR:O	2:A:943:LEU:HG	2.15	0.47
2:A:1977:LEU:HD21	2:A:3620:PHE:HE1	1.78	0.47
2:A:2923:TYR:CD1	2:A:3003:MET:HE1	2.50	0.47
2:A:3269:ASN:O	2:A:3272:HIS:N	2.46	0.47
2:A:4797:GLU:OE1	2:A:4797:GLU:N	2.46	0.47
2:A:4914:ASN:HB3	2:A:4917:ASN:HB2	1.96	0.47
1:E:58:LYS:HD2	1:E:81:VAL:HG12	1.96	0.47
1:F:9:SER:HB2	1:F:72:ARG:HB3	1.97	0.47
2:D:249:SER:OG	2:D:250:GLY:N	2.47	0.47
2:D:2627:TRP:CB	2:D:2630:PHE:HB2	2.43	0.47
2:B:855:VAL:HG13	2:B:1078:CYS:HB2	1.96	0.47
2:B:939:THR:O	2:B:943:LEU:HG	2.15	0.47
2:B:4252:ILE:O	2:B:4256:MET:HG3	2.13	0.47
2:C:1689:ILE:HA	2:C:1703:TYR:HE1	1.78	0.47
2:C:4044:SER:OG	2:C:4045:LYS:N	2.47	0.47
1:H:58:LYS:HB3	1:H:81:VAL:HB	1.96	0.47
2:A:2484:LEU:HD21	2:A:2535:PHE:HE1	1.80	0.47
2:A:3145:SER:O	2:A:3149:GLU:HG2	2.14	0.47
2:A:3281:LEU:HB3	2:A:3285:TYR:CZ	2.49	0.47
2:A:4078:LEU:HD23	2:A:4078:LEU:H	1.79	0.47
1:G:9:SER:HB2	1:G:72:ARG:HB3	1.97	0.47
2:D:2497:ARG:HD3	2:D:2876:THR:HG22	1.95	0.47
2:D:2867:ASN:C	2:D:2867:ASN:HD22	2.13	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:4044:SER:OG	2:D:4045:LYS:N	2.47	0.47
2:B:2923:TYR:CD1	2:B:3003:MET:HE1	2.50	0.47
2:B:4797:GLU:OE1	2:B:4797:GLU:N	2.46	0.47
2:C:2485:LEU:HD22	2:C:2544:LEU:HD23	1.97	0.47
2:C:2882:LYS:HB3	2:C:2886:ARG:NH1	2.29	0.47
2:A:915:HIS:CD2	2:A:917:CYS:HG	2.32	0.47
2:A:3815:GLU:HG2	2:A:3821:THR:HG22	1.96	0.47
2:D:3218:ILE:O	2:D:3218:ILE:HG13	2.15	0.47
2:B:888:ASN:O	2:B:891:GLU:HB2	2.14	0.47
2:B:915:HIS:CE1	2:B:917:CYS:HG	2.33	0.47
2:B:3060:PHE:HZ	2:B:3104:MET:HE1	1.80	0.47
2:B:4258:MET:HE2	2:B:4258:MET:HB2	1.81	0.47
2:B:4652:LYS:NZ	2:B:4945:GLN:OE1	2.25	0.47
2:C:2360:ASP:OD1	2:C:2385:GLY:N	2.41	0.47
2:A:1031:ARG:HE	2:A:1042:THR:HG21	1.79	0.47
2:A:3178:HIS:ND1	2:A:3178:HIS:N	2.63	0.47
1:E:17:PRO:HG3	1:E:107:LEU:HD21	1.97	0.47
2:D:668:ALA:HB2	2:D:1012:ILE:HD11	1.96	0.47
2:D:1689:ILE:HA	2:D:1703:TYR:HE1	1.79	0.47
2:D:2923:TYR:CD1	2:D:3003:MET:HE1	2.50	0.47
2:D:3281:LEU:HB3	2:D:3285:TYR:CZ	2.49	0.47
2:D:3912:VAL:O	2:D:3916:VAL:HG23	2.15	0.47
2:D:4078:LEU:HD23	2:D:4078:LEU:H	1.79	0.47
2:B:364:GLN:NE2	2:B:369:GLY:O	2.45	0.47
2:C:891:GLU:HA	2:C:894:VAL:HG22	1.96	0.47
2:C:895:MET:HA	2:C:898:ILE:HG22	1.96	0.47
2:C:1084:ARG:HG3	2:C:1085:PHE:CD1	2.50	0.47
2:C:1113:MET:HB2	2:C:1156:TRP:HZ2	1.80	0.47
2:C:1161:VAL:HG21	2:C:1225:LYS:HD2	1.97	0.47
2:C:1644:LEU:HD23	2:C:1651:LEU:HA	1.96	0.47
2:C:1968:PRO:O	2:C:1972:GLN:HG3	2.15	0.47
2:C:3936:ALA:O	2:C:3998:GLN:NE2	2.48	0.47
1:H:58:LYS:HD2	1:H:81:VAL:HG12	1.96	0.47
2:A:668:ALA:HB2	2:A:1012:ILE:HD11	1.96	0.47
2:A:850:LEU:HD21	2:A:1249:MET:HE1	1.96	0.47
2:A:855:VAL:HG13	2:A:1078:CYS:HB2	1.96	0.47
2:A:1113:MET:HB2	2:A:1156:TRP:HZ2	1.80	0.47
2:A:1968:PRO:O	2:A:1972:GLN:HG3	2.15	0.47
2:A:2126:ILE:HA	2:A:2142:MET:SD	2.55	0.47
2:A:2773:TRP:HB3	2:A:2774:PRO:HD3	1.96	0.47
2:A:3072:MET:SD	2:A:3140:LEU:HB2	2.55	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:4652:LYS:NZ	2:A:4945:GLN:OE1	2.25	0.47
1:F:50:ARG:NH1	1:F:53:LYS:HD2	2.29	0.47
1:F:58:LYS:HB3	1:F:81:VAL:HB	1.96	0.47
2:D:661:LEU:O	2:D:788:PHE:N	2.41	0.47
2:D:888:ASN:O	2:D:891:GLU:HB2	2.14	0.47
2:D:891:GLU:HA	2:D:894:VAL:HG22	1.97	0.47
2:D:895:MET:HA	2:D:898:ILE:HG22	1.96	0.47
2:D:915:HIS:CD2	2:D:917:CYS:HG	2.33	0.47
2:D:939:THR:O	2:D:943:LEU:HG	2.15	0.47
2:D:1031:ARG:HE	2:D:1042:THR:HG21	1.79	0.47
2:D:2605:MET:HA	2:D:2608:LYS:HE2	1.97	0.47
2:D:4641:PRO:HB3	2:D:4644:TYR:HB3	1.97	0.47
2:B:1729:MET:N	2:B:2108:ILE:O	2.45	0.47
2:B:2484:LEU:HD21	2:B:2535:PHE:HE1	1.80	0.47
2:B:3815:GLU:HG2	2:B:3821:THR:HG22	1.96	0.47
2:B:3912:VAL:O	2:B:3916:VAL:HG23	2.15	0.47
2:C:254:GLU:HA	2:C:257:ARG:HB2	1.97	0.47
2:C:850:LEU:HD21	2:C:1249:MET:HE1	1.96	0.47
2:C:915:HIS:CD2	2:C:917:CYS:HG	2.32	0.47
2:C:939:THR:O	2:C:943:LEU:HG	2.15	0.47
2:C:966:LEU:HB2	2:C:978:PRO:HB2	1.96	0.47
2:C:1031:ARG:HE	2:C:1042:THR:HG21	1.79	0.47
2:C:2923:TYR:CD1	2:C:3003:MET:HE1	2.50	0.47
2:C:3043:ARG:O	2:C:3047:LYS:HG2	2.13	0.47
2:C:3178:HIS:ND1	2:C:3178:HIS:N	2.63	0.47
3:K:115:GLU:HB3	3:K:117:LEU:HG	1.97	0.47
1:H:50:ARG:NH1	1:H:53:LYS:HD2	2.29	0.47
2:A:966:LEU:HB2	2:A:978:PRO:HB2	1.96	0.47
2:A:2605:MET:HA	2:A:2608:LYS:HE2	1.97	0.47
2:A:3912:VAL:O	2:A:3916:VAL:HG23	2.15	0.47
3:I:115:GLU:HB3	3:I:117:LEU:HG	1.97	0.47
2:D:657:PRO:HB2	2:D:659:ILE:HG12	1.97	0.47
2:D:2743:TYR:CD1	2:D:2757:MET:HB2	2.50	0.47
2:D:4640:PHE:CG	2:D:4641:PRO:HD3	2.50	0.47
2:B:2743:TYR:CD1	2:B:2757:MET:HB2	2.50	0.47
2:C:888:ASN:O	2:C:891:GLU:HB2	2.14	0.47
2:C:1276:THR:OG1	2:C:1278:ASP:OD1	2.33	0.47
3:J:32:GLU:O	3:J:35:THR:OG1	2.31	0.47
3:J:115:GLU:HB3	3:J:117:LEU:HG	1.97	0.47
1:H:9:SER:HB2	1:H:72:ARG:HB3	1.97	0.47
1:H:17:PRO:HG3	1:H:107:LEU:HD21	1.97	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:1768:PHE:O	1:E:83:TYR:OH	2.24	0.47
2:A:2743:TYR:CD1	2:A:2757:MET:HB2	2.50	0.47
2:A:3936:ALA:O	2:A:3998:GLN:NE2	2.48	0.47
2:B:254:GLU:HA	2:B:257:ARG:HB2	1.97	0.47
2:B:891:GLU:HA	2:B:894:VAL:HG22	1.97	0.47
2:B:1968:PRO:O	2:B:1972:GLN:HG3	2.15	0.47
2:B:2773:TRP:HB3	2:B:2774:PRO:HD3	1.96	0.47
2:B:2854:LYS:HD2	2:B:2854:LYS:HA	1.66	0.47
2:B:3072:MET:SD	2:B:3140:LEU:HB2	2.55	0.47
2:C:2844:MET:SD	2:C:2889:ALA:HB1	2.55	0.47
2:C:3072:MET:SD	2:C:3140:LEU:HB2	2.55	0.47
2:C:3145:SER:O	2:C:3149:GLU:HG2	2.15	0.47
2:A:2939:TYR:O	2:A:2943:PHE:CD1	2.68	0.47
1:F:58:LYS:HD2	1:F:81:VAL:HG12	1.96	0.47
1:G:36:LYS:HB2	2:C:647:ARG:HH12	1.80	0.47
2:D:1161:VAL:HG21	2:D:1225:LYS:HD2	1.97	0.47
2:D:4867:ILE:HD12	2:C:4867:ILE:CD1	2.45	0.47
2:B:2126:ILE:HA	2:B:2142:MET:SD	2.55	0.47
2:B:2743:TYR:HD1	2:B:2757:MET:HE2	1.78	0.47
2:B:2844:MET:SD	2:B:2889:ALA:HB1	2.55	0.47
2:C:267:VAL:HG12	2:C:273:SER:HB3	1.97	0.47
2:C:1642:LEU:HD21	2:C:1691:ASN:ND2	2.30	0.47
2:C:2126:ILE:HA	2:C:2142:MET:SD	2.55	0.47
2:A:606:ARG:NH1	2:A:1634:GLU:OE2	2.49	0.46
2:A:657:PRO:HB2	2:A:659:ILE:HG12	1.97	0.46
2:A:1084:ARG:HG3	2:A:1085:PHE:CD1	2.50	0.46
2:A:1114:ARG:NH1	2:A:1128:LEU:O	2.42	0.46
2:A:3060:PHE:CZ	2:A:3104:MET:HE1	2.50	0.46
1:G:17:PRO:HG3	1:G:107:LEU:HD21	1.97	0.46
2:D:267:VAL:HG12	2:D:273:SER:HB3	1.97	0.46
2:D:876:PRO:HA	2:D:879:GLU:HG3	1.98	0.46
2:D:2485:LEU:HD22	2:D:2544:LEU:HD23	1.97	0.46
2:D:3778:LEU:HB2	2:D:3854:PHE:CE2	2.50	0.46
2:B:3778:LEU:HB2	2:B:3854:PHE:CE2	2.50	0.46
2:B:3936:ALA:O	2:B:3998:GLN:NE2	2.48	0.46
2:C:2983:LEU:HD13	2:C:2983:LEU:HA	1.81	0.46
2:C:3778:LEU:HB2	2:C:3854:PHE:CE2	2.50	0.46
2:C:3917:PHE:CZ	2:C:3978:MET:HG3	2.51	0.46
2:C:3975:GLN:O	2:C:3979:VAL:HG23	2.16	0.46
2:C:4797:GLU:OE1	2:C:4797:GLU:N	2.46	0.46
2:C:4914:ASN:HB3	2:C:4917:ASN:HB2	1.96	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:78:THR:OG1	1:H:80:ASP:OD1	2.24	0.46
2:A:267:VAL:HG12	2:A:273:SER:HB3	1.97	0.46
2:A:3060:PHE:HZ	2:A:3104:MET:HE1	1.79	0.46
2:A:4183:LYS:HB2	2:A:4183:LYS:HZ2	1.75	0.46
2:A:4258:MET:HE2	2:A:4258:MET:HB2	1.81	0.46
1:G:58:LYS:HD2	1:G:81:VAL:HG12	1.96	0.46
1:G:58:LYS:HB3	1:G:81:VAL:HB	1.96	0.46
2:D:1084:ARG:HG3	2:D:1085:PHE:CD1	2.50	0.46
2:D:1113:MET:HB2	2:D:1156:TRP:HZ2	1.80	0.46
2:D:1419:PHE:HE2	2:D:1562:ASN:HB3	1.81	0.46
2:D:2484:LEU:HD21	2:D:2535:PHE:HE1	1.80	0.46
2:D:3189:SER:HA	2:D:3192:ARG:HB2	1.96	0.46
2:B:75:VAL:O	2:B:79:GLN:HG2	2.16	0.46
2:B:267:VAL:HG12	2:B:273:SER:HB3	1.97	0.46
2:B:966:LEU:HB2	2:B:978:PRO:HB2	1.96	0.46
2:B:1084:ARG:HG3	2:B:1085:PHE:CD1	2.50	0.46
2:B:2725:ALA:HB1	2:B:2760:TYR:HE1	1.80	0.46
2:C:2596:VAL:HG21	2:C:2610:LEU:HD11	1.96	0.46
2:C:3060:PHE:CZ	2:C:3104:MET:HE1	2.50	0.46
2:C:4033:LYS:HA	2:C:4033:LYS:HD2	1.76	0.46
2:C:4641:PRO:HB3	2:C:4644:TYR:HB3	1.97	0.46
2:A:2355:GLU:OE1	2:A:2355:GLU:N	2.49	0.46
2:A:3025:ASP:O	2:A:3028:SER:OG	2.20	0.46
2:A:4634:VAL:HG22	2:A:4640:PHE:HD1	1.80	0.46
1:F:17:PRO:HG3	1:F:107:LEU:HD21	1.97	0.46
2:D:606:ARG:NH1	2:D:1634:GLU:OE2	2.49	0.46
2:D:1968:PRO:O	2:D:1972:GLN:HG3	2.15	0.46
2:D:3178:HIS:N	2:D:3178:HIS:ND1	2.63	0.46
2:D:4914:ASN:HB3	2:D:4917:ASN:HB2	1.96	0.46
2:B:3148:VAL:O	2:B:3152:ARG:HG3	2.15	0.46
2:B:4640:PHE:CG	2:B:4641:PRO:HD3	2.50	0.46
2:C:75:VAL:O	2:C:79:GLN:HG2	2.16	0.46
2:C:1502:ASN:OD1	2:C:1503:ASN:N	2.48	0.46
2:C:2725:ALA:HB1	2:C:2760:TYR:HE1	1.80	0.46
2:C:4078:LEU:HD23	2:C:4078:LEU:H	1.79	0.46
2:A:75:VAL:O	2:A:79:GLN:HG2	2.16	0.46
2:A:1433:PHE:CD2	2:A:1551:ASN:HB3	2.51	0.46
2:A:2627:TRP:CB	2:A:2630:PHE:HB2	2.43	0.46
2:A:3975:GLN:O	2:A:3979:VAL:HG23	2.16	0.46
2:A:4044:SER:OG	2:A:4045:LYS:N	2.47	0.46
2:D:2596:VAL:HG21	2:D:2610:LEU:HD11	1.96	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:876:PRO:HA	2:B:879:GLU:HG3	1.98	0.46
2:B:1031:ARG:HE	2:B:1042:THR:HG21	1.80	0.46
2:B:3218:ILE:O	2:B:3218:ILE:HG13	2.15	0.46
2:B:4078:LEU:HD23	2:B:4078:LEU:H	1.79	0.46
2:C:876:PRO:HA	2:C:879:GLU:HG3	1.98	0.46
2:C:1419:PHE:HE2	2:C:1562:ASN:HB3	1.81	0.46
2:C:3148:VAL:O	2:C:3152:ARG:HG3	2.15	0.46
2:C:3926:GLY:CA	2:C:4935:GLY:HA3	2.41	0.46
2:A:2844:MET:SD	2:A:2889:ALA:HB1	2.55	0.46
2:A:3649:ALA:C	2:A:3652:PRO:HD2	2.41	0.46
2:D:2392:TYR:O	2:D:2396:ILE:HD13	2.16	0.46
2:D:2725:ALA:HB1	2:D:2760:TYR:HE1	1.80	0.46
2:D:3072:MET:SD	2:D:3140:LEU:HB2	2.55	0.46
2:D:3218:ILE:CD1	2:D:3239:LEU:HD21	2.46	0.46
2:D:3917:PHE:CZ	2:D:3978:MET:HG3	2.50	0.46
2:D:3936:ALA:O	2:D:3998:GLN:NE2	2.48	0.46
2:B:2485:LEU:HD22	2:B:2544:LEU:HD23	1.96	0.46
2:B:3074:ASN:OD1	2:B:3075:LEU:N	2.49	0.46
2:B:3145:SER:O	2:B:3149:GLU:HG2	2.15	0.46
2:C:2484:LEU:HD21	2:C:2535:PHE:HE1	1.80	0.46
2:C:2939:TYR:O	2:C:2943:PHE:CD1	2.68	0.46
2:C:3183:ILE:HD11	2:C:3187:LYS:NZ	2.30	0.46
2:C:3218:ILE:O	2:C:3218:ILE:HG13	2.15	0.46
2:C:3912:VAL:O	2:C:3916:VAL:HG23	2.15	0.46
2:A:254:GLU:HA	2:A:257:ARG:HB2	1.97	0.46
2:A:661:LEU:O	2:A:788:PHE:N	2.41	0.46
2:A:1642:LEU:HD21	2:A:1691:ASN:ND2	2.31	0.46
2:A:2392:TYR:O	2:A:2396:ILE:HD13	2.16	0.46
2:A:2760:TYR:C	2:A:2760:TYR:CD2	2.94	0.46
2:A:3917:PHE:CZ	2:A:3978:MET:HG3	2.51	0.46
2:B:2760:TYR:C	2:B:2760:TYR:CD2	2.94	0.46
3:L:115:GLU:HB3	3:L:117:LEU:HG	1.97	0.46
2:A:766:ILE:HB	2:A:779:PHE:HB2	1.98	0.46
2:A:3183:ILE:HD11	2:A:3187:LYS:NZ	2.30	0.46
2:A:3778:LEU:HB2	2:A:3854:PHE:CE2	2.50	0.46
2:A:4620:GLN:OE1	2:A:4632:ARG:NH2	2.35	0.46
2:D:75:VAL:O	2:D:79:GLN:HG2	2.16	0.46
2:D:2582:PRO:HD2	2:D:2630:PHE:HD1	1.81	0.46
2:D:2844:MET:SD	2:D:2889:ALA:HB1	2.55	0.46
2:D:3060:PHE:CZ	2:D:3104:MET:HE1	2.50	0.46
2:B:915:HIS:CD2	2:B:917:CYS:HG	2.32	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:2062:ILE:HG21	2:B:2087:LEU:HG	1.97	0.46
2:B:3178:HIS:ND1	2:B:3178:HIS:N	2.63	0.46
2:B:3975:GLN:O	2:B:3979:VAL:HG23	2.16	0.46
2:B:4183:LYS:HB2	2:B:4183:LYS:HZ3	1.77	0.46
2:C:449:ILE:HG13	2:C:529:ILE:HD11	1.98	0.46
2:C:2488:LEU:HD12	2:C:2492:PHE:HB2	1.98	0.46
2:A:1161:VAL:HG21	2:A:1225:LYS:HD2	1.97	0.46
2:A:2585:MET:H	2:A:2585:MET:CE	2.22	0.46
2:A:2703:PRO:HB3	2:A:2850:ASN:OD1	2.16	0.46
2:A:4481:TRP:CD1	2:A:4692:SER:HA	2.51	0.46
2:A:4640:PHE:CG	2:A:4641:PRO:HD3	2.50	0.46
2:D:254:GLU:HA	2:D:257:ARG:HB2	1.97	0.46
2:D:2126:ILE:HA	2:D:2142:MET:SD	2.55	0.46
2:D:3148:VAL:O	2:D:3152:ARG:HG3	2.15	0.46
2:D:3237:VAL:O	2:D:3240:PRO:HD2	2.15	0.46
2:D:4481:TRP:CD1	2:D:4692:SER:HA	2.51	0.46
2:B:4634:VAL:HG22	2:B:4640:PHE:HD1	1.80	0.46
2:C:657:PRO:HB2	2:C:659:ILE:HG12	1.97	0.46
2:C:3218:ILE:CD1	2:C:3239:LEU:HD21	2.46	0.46
2:A:2485:LEU:HD22	2:A:2544:LEU:HD23	1.97	0.46
2:A:3148:VAL:O	2:A:3152:ARG:HG3	2.15	0.46
2:A:4624:ASP:HB3	2:D:4238:ILE:HG12	1.97	0.46
3:I:32:GLU:O	3:I:35:THR:OG1	2.31	0.46
2:D:449:ILE:HG13	2:D:529:ILE:HD11	1.98	0.46
2:D:2760:TYR:C	2:D:2760:TYR:CD2	2.94	0.46
2:D:2895:PHE:HA	2:D:2898:ILE:HG12	1.98	0.46
2:B:1433:PHE:CD2	2:B:1551:ASN:HB3	2.51	0.46
2:B:2392:TYR:O	2:B:2396:ILE:HD13	2.16	0.46
2:B:2627:TRP:CB	2:B:2630:PHE:HB2	2.43	0.46
2:B:2760:TYR:HD2	2:B:2760:TYR:C	2.24	0.46
2:C:364:GLN:NE2	2:C:369:GLY:O	2.45	0.46
2:C:606:ARG:NH1	2:C:1634:GLU:OE2	2.48	0.46
2:C:2355:GLU:OE1	2:C:2355:GLU:N	2.49	0.46
2:C:2743:TYR:CD1	2:C:2757:MET:HB2	2.50	0.46
2:C:2760:TYR:C	2:C:2760:TYR:CD2	2.94	0.46
2:C:3045:VAL:O	2:C:3054:LYS:NZ	2.46	0.46
2:C:3074:ASN:OD1	2:C:3075:LEU:N	2.49	0.46
2:C:3649:ALA:C	2:C:3652:PRO:HD2	2.41	0.46
2:A:891:GLU:HA	2:A:894:VAL:HG22	1.96	0.46
2:A:2854:LYS:HA	2:A:2854:LYS:HD2	1.66	0.46
2:A:3006:SER:O	2:A:3010:LYS:HE2	2.16	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:3237:VAL:O	2:A:3240:PRO:HD2	2.15	0.46
2:A:4641:PRO:HB3	2:A:4644:TYR:HB3	1.97	0.46
2:D:855:VAL:HG13	2:D:1078:CYS:HB2	1.97	0.46
2:D:1642:LEU:HD21	2:D:1691:ASN:ND2	2.31	0.46
2:D:2355:GLU:OE1	2:D:2355:GLU:N	2.49	0.46
2:D:2760:TYR:HD2	2:D:2760:TYR:C	2.24	0.46
2:D:3074:ASN:OD1	2:D:3075:LEU:N	2.49	0.46
2:D:3183:ILE:HD11	2:D:3187:LYS:NZ	2.30	0.46
2:B:607:ASN:HB3	2:B:610:VAL:HG23	1.98	0.46
2:B:1419:PHE:HE2	2:B:1562:ASN:HB3	1.81	0.46
2:B:1642:LEU:HD21	2:B:1691:ASN:ND2	2.31	0.46
2:B:2585:MET:H	2:B:2585:MET:CE	2.22	0.46
2:B:2605:MET:HA	2:B:2608:LYS:HE2	1.97	0.46
2:B:2895:PHE:HA	2:B:2898:ILE:HG12	1.98	0.46
2:B:3071:THR:HG22	2:B:3075:LEU:HD23	1.97	0.46
2:B:3183:ILE:HD11	2:B:3187:LYS:NZ	2.30	0.46
2:B:3218:ILE:CD1	2:B:3239:LEU:HD21	2.46	0.46
2:B:4641:PRO:HB3	2:B:4644:TYR:HB3	1.97	0.46
2:C:766:ILE:HB	2:C:779:PHE:HB2	1.98	0.46
2:C:1962:THR:HG23	2:C:1966:ARG:NE	2.30	0.46
2:C:4258:MET:HE2	2:C:4258:MET:HB2	1.81	0.46
2:A:1106:GLU:HB3	2:A:1214:ARG:HB2	1.98	0.45
2:A:3218:ILE:CD1	2:A:3239:LEU:HD21	2.46	0.45
2:D:766:ILE:HB	2:D:779:PHE:HB2	1.98	0.45
2:D:3006:SER:O	2:D:3010:LYS:HE2	2.16	0.45
2:D:3975:GLN:O	2:D:3979:VAL:HG23	2.16	0.45
2:B:467:ASP:O	2:B:475:LYS:NZ	2.37	0.45
2:B:606:ARG:NH1	2:B:1634:GLU:OE2	2.48	0.45
2:B:1113:MET:HB2	2:B:1156:TRP:HZ2	1.80	0.45
2:B:1161:VAL:HG21	2:B:1225:LYS:HD2	1.97	0.45
2:B:1276:THR:OG1	2:B:1278:ASP:OD1	2.33	0.45
2:B:2703:PRO:HB3	2:B:2850:ASN:OD1	2.16	0.45
2:B:3219:VAL:O	2:B:3223:GLU:OE1	2.35	0.45
2:B:3917:PHE:CZ	2:B:3978:MET:HG3	2.50	0.45
2:C:855:VAL:HG13	2:C:1078:CYS:HB2	1.97	0.45
2:C:3060:PHE:HZ	2:C:3104:MET:HE1	1.80	0.45
3:J:92:VAL:HG23	3:J:93:PHE:CD1	2.51	0.45
2:A:876:PRO:HA	2:A:879:GLU:HG3	1.98	0.45
2:A:1419:PHE:HE2	2:A:1562:ASN:HB3	1.81	0.45
2:A:2760:TYR:HD2	2:A:2760:TYR:C	2.24	0.45
2:A:4120:GLU:HA	2:A:4123:GLU:HG2	1.98	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:816:PRO:HB2	2:D:819:TYR:CD1	2.52	0.45
2:D:1433:PHE:CD2	2:D:1551:ASN:HB3	2.51	0.45
2:D:2703:PRO:HB3	2:D:2850:ASN:OD1	2.16	0.45
2:B:436:LEU:HD11	2:B:447:LEU:HD11	1.98	0.45
2:B:816:PRO:HB2	2:B:819:TYR:CD1	2.52	0.45
2:B:2488:LEU:HD12	2:B:2492:PHE:HB2	1.98	0.45
2:B:2870:LEU:HD22	2:B:2877:LEU:HG	1.99	0.45
2:C:997:ASP:HA	2:C:1047:LYS:HZ1	1.81	0.45
2:C:2303:ARG:HG2	2:C:2401:ARG:HD2	1.98	0.45
2:C:2582:PRO:HD2	2:C:2630:PHE:HD1	1.81	0.45
2:C:4634:VAL:HG22	2:C:4640:PHE:HD1	1.80	0.45
2:A:13:PHE:CE1	2:A:174:LYS:HD2	2.52	0.45
2:A:242:ASP:OD1	2:A:243:GLU:N	2.49	0.45
2:A:816:PRO:HB2	2:A:819:TYR:CD1	2.52	0.45
2:A:1502:ASN:OD1	2:A:1503:ASN:N	2.48	0.45
2:A:2791:ARG:HD2	2:A:2901:TYR:CE1	2.52	0.45
2:A:3071:THR:HG22	2:A:3075:LEU:HD23	1.97	0.45
2:D:3316:LYS:O	2:D:3317:THR:OG1	2.31	0.45
2:B:242:ASP:OD1	2:B:243:GLU:N	2.49	0.45
2:B:3060:PHE:CZ	2:B:3104:MET:HE1	2.50	0.45
2:C:13:PHE:CE1	2:C:174:LYS:HD2	2.52	0.45
2:C:1433:PHE:CD2	2:C:1551:ASN:HB3	2.51	0.45
2:C:1689:ILE:HG22	2:C:1794:MET:HE1	1.98	0.45
2:C:2760:TYR:HD2	2:C:2760:TYR:C	2.24	0.45
2:C:3025:ASP:O	2:C:3028:SER:OG	2.20	0.45
2:C:3071:THR:HG22	2:C:3075:LEU:HD23	1.97	0.45
2:C:3134:LEU:HD12	2:C:3162:PHE:CE2	2.43	0.45
2:A:1689:ILE:HG22	2:A:1794:MET:HE1	1.98	0.45
2:D:1312:GLU:OE1	2:D:1536:SER:OG	2.30	0.45
2:D:3071:THR:HG22	2:D:3075:LEU:HD23	1.97	0.45
2:B:657:PRO:HB2	2:B:659:ILE:HG12	1.97	0.45
2:B:2355:GLU:N	2:B:2355:GLU:OE1	2.49	0.45
2:B:2594:PHE:HD2	2:B:2594:PHE:O	2.00	0.45
2:C:123:HIS:N	2:C:128:MET:O	2.43	0.45
2:C:3131:TYR:HE1	2:C:3166:PHE:CZ	2.19	0.45
2:C:3237:VAL:O	2:C:3240:PRO:HD2	2.16	0.45
3:L:51:ASP:OD1	3:L:52:MET:N	2.50	0.45
2:D:1114:ARG:NH1	2:D:1128:LEU:O	2.42	0.45
2:D:1689:ILE:HG22	2:D:1794:MET:HE1	1.98	0.45
2:B:3006:SER:O	2:B:3010:LYS:HE2	2.16	0.45
2:B:3043:ARG:NH1	2:B:3117:PHE:HA	2.32	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:3697:LYS:HA	2:B:3700:HIS:CD2	2.52	0.45
2:B:4033:LYS:HA	2:B:4033:LYS:HD2	1.76	0.45
2:C:966:LEU:HD13	2:C:970:TYR:CD2	2.52	0.45
2:A:1696:GLY:HA3	2:A:1816:PHE:CD2	2.51	0.45
2:A:2062:ILE:HG21	2:A:2087:LEU:HG	1.97	0.45
2:A:3074:ASN:OD1	2:A:3075:LEU:N	2.49	0.45
2:A:3241:MET:N	2:A:3241:MET:HE2	2.32	0.45
2:D:2554:ARG:NH1	2:D:2554:ARG:O	2.50	0.45
2:D:2870:LEU:HD22	2:D:2877:LEU:HG	1.99	0.45
2:D:3241:MET:HE2	2:D:3241:MET:N	2.32	0.45
2:B:966:LEU:HD13	2:B:970:TYR:CD2	2.52	0.45
2:B:1502:ASN:OD1	2:B:1503:ASN:N	2.48	0.45
2:B:1696:GLY:HA3	2:B:1816:PHE:CD2	2.51	0.45
2:B:2664:LEU:O	2:B:2667:PRO:HD2	2.17	0.45
2:B:2791:ARG:HD2	2:B:2901:TYR:CE1	2.52	0.45
2:C:125:TYR:CE1	2:C:417:ARG:HD3	2.52	0.45
2:C:2392:TYR:O	2:C:2396:ILE:HD13	2.16	0.45
2:C:3043:ARG:NH1	2:C:3117:PHE:HA	2.32	0.45
2:C:3219:VAL:O	2:C:3223:GLU:OE1	2.35	0.45
3:K:20:PHE:O	3:K:22:LYS:NZ	2.49	0.45
3:K:51:ASP:OD1	3:K:52:MET:N	2.50	0.45
2:A:307:SER:HB3	2:A:327:THR:HG22	1.99	0.45
2:A:449:ILE:HG13	2:A:529:ILE:HD11	1.98	0.45
2:A:739:ARG:HB3	2:A:1469:LEU:HD11	1.99	0.45
2:A:1689:ILE:HG23	2:A:1703:TYR:CE1	2.52	0.45
2:A:2488:LEU:HD12	2:A:2492:PHE:HB2	1.98	0.45
2:A:2582:PRO:HD2	2:A:2630:PHE:HD1	1.81	0.45
2:D:966:LEU:HD13	2:D:970:TYR:CD2	2.52	0.45
2:D:1895:GLN:OE1	2:D:2068:ARG:NH1	2.46	0.45
2:D:3649:ALA:C	2:D:3652:PRO:HD2	2.41	0.45
2:D:3697:LYS:HA	2:D:3700:HIS:CD2	2.52	0.45
2:D:3790:PHE:HE1	2:D:3858:LEU:HD23	1.82	0.45
2:B:2303:ARG:HG2	2:B:2401:ARG:HD2	1.98	0.45
2:B:2436:ILE:HG22	2:B:2491:GLY:HA3	1.99	0.45
2:B:3167:PRO:HA	2:B:3248:ARG:NH1	2.32	0.45
2:B:3649:ALA:C	2:B:3652:PRO:HD2	2.41	0.45
2:C:242:ASP:OD1	2:C:243:GLU:N	2.49	0.45
2:C:607:ASN:HB3	2:C:610:VAL:HG23	1.98	0.45
2:C:2062:ILE:HG21	2:C:2087:LEU:HG	1.97	0.45
2:C:2436:ILE:HG22	2:C:2491:GLY:HA3	1.99	0.45
2:C:2605:MET:HA	2:C:2608:LYS:HE2	1.97	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:4481:TRP:CD1	2:C:4692:SER:HA	2.51	0.45
3:K:32:GLU:O	3:K:35:THR:OG1	2.31	0.45
2:A:125:TYR:CE1	2:A:417:ARG:HD3	2.52	0.45
2:A:1276:THR:OG1	2:A:1278:ASP:OD1	2.33	0.45
2:A:2959:GLU:OE1	2:A:2959:GLU:N	2.49	0.45
2:A:3072:MET:O	2:A:3076:LYS:HD3	2.17	0.45
2:A:3166:PHE:CE2	2:A:3168:VAL:HB	2.48	0.45
2:A:3219:VAL:O	2:A:3223:GLU:OE1	2.35	0.45
3:I:51:ASP:OD1	3:I:52:MET:N	2.50	0.45
2:D:1696:GLY:HA3	2:D:1816:PHE:CD2	2.51	0.45
2:D:2303:ARG:HG2	2:D:2401:ARG:HD2	1.98	0.45
2:D:2488:LEU:HD12	2:D:2492:PHE:HB2	1.98	0.45
2:D:4563:GLU:OE1	2:D:4568:MET:HB2	2.17	0.45
2:B:123:HIS:N	2:B:128:MET:O	2.43	0.45
2:B:125:TYR:CE1	2:B:417:ARG:HD3	2.52	0.45
2:B:739:ARG:HB3	2:B:1469:LEU:HD11	1.99	0.45
2:B:1895:GLN:OE1	2:B:2068:ARG:NH1	2.46	0.45
2:B:2641:SER:HB3	2:B:2676:LEU:HD21	1.99	0.45
2:B:2959:GLU:OE1	2:B:2959:GLU:N	2.49	0.45
2:B:3237:VAL:O	2:B:3240:PRO:HD2	2.16	0.45
2:B:4197:ILE:HG12	2:B:4923:MET:HE2	1.99	0.45
2:C:3205:CYS:HB3	2:C:3208:ILE:HD13	1.99	0.45
3:J:51:ASP:OD1	3:J:52:MET:N	2.50	0.45
2:A:2664:LEU:O	2:A:2667:PRO:HD2	2.17	0.45
2:A:3043:ARG:NH1	2:A:3117:PHE:HA	2.32	0.45
2:D:307:SER:HB3	2:D:327:THR:HG22	1.99	0.45
2:D:1689:ILE:HG23	2:D:1703:TYR:CE1	2.52	0.45
2:D:2664:LEU:O	2:D:2667:PRO:HD2	2.17	0.45
2:D:4634:VAL:HG22	2:D:4640:PHE:HD1	1.80	0.45
2:B:13:PHE:CE1	2:B:174:LYS:HD2	2.52	0.45
2:B:4120:GLU:HA	2:B:4123:GLU:HG2	1.98	0.45
2:B:4620:GLN:OE1	2:B:4632:ARG:NH2	2.35	0.45
2:C:1696:GLY:HA3	2:C:1816:PHE:CD2	2.51	0.45
2:C:2594:PHE:HD2	2:C:2594:PHE:O	2.00	0.45
2:C:2666:LEU:HB3	2:C:2667:PRO:HD3	1.99	0.45
2:C:2703:PRO:HB3	2:C:2850:ASN:OD1	2.16	0.45
2:C:3072:MET:O	2:C:3076:LYS:HD3	2.17	0.45
2:C:4197:ILE:HG12	2:C:4923:MET:HE2	1.99	0.45
3:K:49:LEU:O	3:K:52:MET:HG2	2.17	0.45
2:A:3167:PRO:HA	2:A:3248:ARG:NH1	2.32	0.45
2:A:3744:ILE:O	2:A:3747:SER:OG	2.30	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:4197:ILE:HG12	2:A:4923:MET:HE2	1.99	0.45
2:A:4809:MET:HG3	2:D:4518:LEU:HA	1.98	0.45
3:I:92:VAL:HG23	3:I:93:PHE:CD1	2.51	0.45
2:D:607:ASN:HB3	2:D:610:VAL:HG23	1.98	0.45
2:D:2666:LEU:HB3	2:D:2667:PRO:HD3	1.99	0.45
2:D:2791:ARG:HD2	2:D:2901:TYR:CE1	2.52	0.45
2:D:3131:TYR:HE1	2:D:3166:PHE:CZ	2.19	0.45
2:D:3167:PRO:HA	2:D:3248:ARG:NH1	2.32	0.45
2:D:4197:ILE:HG12	2:D:4923:MET:HE2	1.99	0.45
2:B:1689:ILE:HG23	2:B:1703:TYR:CE1	2.52	0.45
2:B:3790:PHE:HE1	2:B:3858:LEU:HD23	1.82	0.45
2:C:428:ARG:NH2	2:C:448:PRO:HG3	2.32	0.45
2:C:1106:GLU:HB3	2:C:1214:ARG:HB2	1.98	0.45
2:C:2554:ARG:NH1	2:C:2554:ARG:O	2.50	0.45
2:C:2870:LEU:HD22	2:C:2877:LEU:HG	1.99	0.45
2:C:2979:ARG:HH12	2:C:3038:GLN:HB3	1.82	0.45
2:C:3006:SER:O	2:C:3010:LYS:HE2	2.16	0.45
2:C:3296:MET:HE3	2:C:3296:MET:HB3	1.85	0.45
2:C:4640:PHE:CG	2:C:4641:PRO:HD3	2.50	0.45
3:J:49:LEU:O	3:J:52:MET:HG2	2.17	0.45
3:K:92:VAL:HG23	3:K:93:PHE:CD1	2.51	0.45
1:F:36:LYS:HB2	2:B:647:ARG:NH1	2.28	0.44
2:B:428:ARG:NH2	2:B:448:PRO:HG3	2.32	0.44
2:B:3205:CYS:HB3	2:B:3208:ILE:HD13	1.99	0.44
2:B:4481:TRP:CD1	2:B:4692:SER:HA	2.51	0.44
2:C:893:TRP:O	2:C:897:LYS:HG2	2.17	0.44
2:C:2664:LEU:O	2:C:2667:PRO:HD2	2.17	0.44
2:C:2959:GLU:OE1	2:C:2959:GLU:N	2.49	0.44
3:J:20:PHE:O	3:J:22:LYS:NZ	2.49	0.44
2:A:249:SER:OG	2:A:250:GLY:N	2.47	0.44
2:A:436:LEU:HD11	2:A:447:LEU:HD11	1.98	0.44
2:A:966:LEU:HD13	2:A:970:TYR:CD2	2.52	0.44
2:A:2303:ARG:HG2	2:A:2401:ARG:HD2	1.98	0.44
2:A:4563:GLU:OE1	2:A:4568:MET:HB2	2.17	0.44
2:D:13:PHE:CE1	2:D:174:LYS:HD2	2.52	0.44
2:D:428:ARG:NH2	2:D:448:PRO:HG3	2.33	0.44
2:D:2062:ILE:HG21	2:D:2087:LEU:HG	1.97	0.44
2:D:3280:ILE:O	2:D:3284:ILE:HG23	2.17	0.44
2:B:766:ILE:HB	2:B:779:PHE:HB2	1.98	0.44
2:C:1114:ARG:NH1	2:C:1128:LEU:O	2.42	0.44
2:C:2895:PHE:HA	2:C:2898:ILE:HG12	1.98	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:3241:MET:N	2:C:3241:MET:HE2	2.32	0.44
2:A:2594:PHE:O	2:A:2594:PHE:HD2	2.00	0.44
2:A:2895:PHE:HA	2:A:2898:ILE:HG12	1.98	0.44
2:A:3205:CYS:HB3	2:A:3208:ILE:HD13	1.99	0.44
2:D:1649:GLU:HG2	2:D:1650:LEU:N	2.33	0.44
2:D:2641:SER:HB3	2:D:2676:LEU:HD21	1.99	0.44
2:D:3219:VAL:O	2:D:3223:GLU:OE1	2.35	0.44
2:B:988:LEU:HG	2:B:1051:ARG:HH21	1.83	0.44
2:B:1079:SER:OG	2:B:1083:GLU:O	2.26	0.44
2:B:3072:MET:O	2:B:3076:LYS:HD3	2.17	0.44
2:B:4563:GLU:OE1	2:B:4568:MET:HB2	2.17	0.44
2:C:307:SER:HB3	2:C:327:THR:HG22	1.99	0.44
2:C:2791:ARG:HD2	2:C:2901:TYR:CE1	2.52	0.44
2:C:3167:PRO:HA	2:C:3248:ARG:NH1	2.32	0.44
3:L:49:LEU:O	3:L:52:MET:HG2	2.17	0.44
2:A:607:ASN:HB3	2:A:610:VAL:HG23	1.98	0.44
2:A:4707:MET:HG3	2:D:4252:ILE:HG21	2.00	0.44
1:G:22:THR:HB	1:G:108:GLU:HG3	2.00	0.44
3:I:49:LEU:O	3:I:52:MET:HG2	2.17	0.44
2:D:739:ARG:HB3	2:D:1469:LEU:HD11	1.99	0.44
2:D:1106:GLU:HB3	2:D:1214:ARG:HB2	1.98	0.44
2:D:2939:TYR:O	2:D:2943:PHE:CD1	2.68	0.44
2:D:2983:LEU:HD13	2:D:2983:LEU:HA	1.81	0.44
2:D:3134:LEU:HD12	2:D:3162:PHE:CE2	2.43	0.44
2:D:3166:PHE:CE2	2:D:3168:VAL:HB	2.48	0.44
2:D:3205:CYS:HB3	2:D:3208:ILE:HD13	1.99	0.44
2:D:4258:MET:HB2	2:D:4258:MET:HE2	1.81	0.44
2:B:307:SER:HB3	2:B:327:THR:HG22	1.99	0.44
2:B:449:ILE:HG13	2:B:529:ILE:HD11	1.98	0.44
2:B:2666:LEU:HB3	2:B:2667:PRO:HD3	1.99	0.44
2:B:3241:MET:HE2	2:B:3241:MET:N	2.32	0.44
2:C:506:HIS:NE2	2:C:534:TYR:OH	2.40	0.44
3:J:37:MET:HG3	3:J:42:GLN:HE21	1.83	0.44
2:A:1649:GLU:HG2	2:A:1650:LEU:N	2.33	0.44
2:A:1729:MET:N	2:A:2108:ILE:O	2.45	0.44
2:A:3280:ILE:O	2:A:3284:ILE:HG23	2.17	0.44
2:D:1477:HIS:ND1	2:D:1478:GLU:HG2	2.33	0.44
2:D:3043:ARG:NH1	2:D:3117:PHE:HA	2.32	0.44
2:D:3227:ARG:HD3	2:D:3290:ILE:HG21	2.00	0.44
2:D:3744:ILE:O	2:D:3747:SER:OG	2.30	0.44
2:D:4120:GLU:HA	2:D:4123:GLU:HG2	1.98	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:4872:GLU:CD	2:C:4874:ARG:HD2	2.42	0.44
2:B:1114:ARG:NH1	2:B:1128:LEU:O	2.42	0.44
2:B:1477:HIS:ND1	2:B:1478:GLU:HG2	2.33	0.44
2:B:2979:ARG:HH12	2:B:3038:GLN:HB3	1.82	0.44
2:C:1989:PRO:O	2:C:1993:ARG:HG3	2.18	0.44
1:H:27:TYR:OH	1:H:38:ASP:OD2	2.35	0.44
2:A:2725:ALA:HB1	2:A:2760:TYR:HE1	1.80	0.44
2:A:2926:LEU:HD22	2:A:3003:MET:HG3	2.00	0.44
2:A:3134:LEU:HD12	2:A:3162:PHE:CE2	2.43	0.44
2:A:3218:ILE:O	2:A:3218:ILE:HG13	2.15	0.44
2:A:3697:LYS:HA	2:A:3700:HIS:CD2	2.52	0.44
2:A:3790:PHE:HE1	2:A:3858:LEU:HD23	1.82	0.44
2:A:4818:TYR:OH	2:B:4847:ASP:OD2	2.29	0.44
3:I:37:MET:HG3	3:I:42:GLN:HE21	1.83	0.44
2:D:1940:GLN:OE1	2:D:3608:LEU:HB3	2.18	0.44
2:D:2594:PHE:O	2:D:2594:PHE:HD2	2.00	0.44
2:B:195:SER:HB3	2:B:202:HIS:HB2	1.99	0.44
2:B:520:ARG:C	2:B:523:GLY:H	2.26	0.44
2:B:893:TRP:O	2:B:897:LYS:HG2	2.17	0.44
2:B:969:ASN:OD1	2:B:970:TYR:N	2.50	0.44
2:B:4520:TYR:HD1	2:B:4561:LEU:HD13	1.83	0.44
2:B:4743:LEU:O	2:B:4746:ILE:HG12	2.18	0.44
2:C:436:LEU:HD11	2:C:447:LEU:HD11	1.98	0.44
2:C:463:PHE:HZ	2:C:489:PHE:HD2	1.66	0.44
2:C:816:PRO:HB2	2:C:819:TYR:CD1	2.52	0.44
2:C:1316:LYS:HA	2:C:1316:LYS:HD2	1.84	0.44
2:C:2179:LEU:O	2:C:2183:GLU:HB2	2.18	0.44
2:C:2657:TYR:CZ	2:C:2659:GLN:HB2	2.53	0.44
2:C:3134:LEU:HB2	2:C:3162:PHE:CE2	2.53	0.44
2:C:3227:ARG:HD3	2:C:3290:ILE:HG21	2.00	0.44
2:C:3697:LYS:HA	2:C:3700:HIS:CD2	2.52	0.44
2:C:4520:TYR:HD1	2:C:4561:LEU:HD13	1.83	0.44
1:H:22:THR:HB	1:H:108:GLU:HG3	2.00	0.44
2:A:2436:ILE:HG22	2:A:2491:GLY:HA3	1.99	0.44
2:A:2830:ASN:HB3	2:B:1434:PRO:O	2.17	0.44
2:A:4055:HIS:CE1	2:A:4057:HIS:HB2	2.53	0.44
2:D:463:PHE:HZ	2:D:489:PHE:HD2	1.66	0.44
2:D:953:SER:OG	2:D:954:ASP:N	2.51	0.44
2:D:2852:TRP:HD1	2:D:2884:LYS:HZ1	1.58	0.44
2:D:2926:LEU:HD22	2:D:3003:MET:HG3	2.00	0.44
2:B:1649:GLU:HG2	2:B:1650:LEU:N	2.33	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:2582:PRO:HA	2:B:2585:MET:HE1	2.00	0.44
2:B:3227:ARG:HD3	2:B:3290:ILE:HG21	2.00	0.44
2:B:4735:ASN:HB3	2:B:4738:PHE:CD2	2.53	0.44
2:C:739:ARG:HB3	2:C:1469:LEU:HD11	1.99	0.44
2:C:1427:TYR:HB2	2:C:1563:VAL:HG11	2.00	0.44
2:C:3594:GLN:HB3	2:C:3595:ARG:H	1.54	0.44
2:C:4735:ASN:HB3	2:C:4738:PHE:CD2	2.53	0.44
2:A:893:TRP:O	2:A:897:LYS:HG2	2.17	0.44
2:A:1477:HIS:ND1	2:A:1478:GLU:HG2	2.33	0.44
2:A:1940:GLN:OE1	2:A:3608:LEU:HB3	2.18	0.44
2:A:3250:TRP:HZ3	2:A:3256:ASN:HD21	1.66	0.44
1:F:22:THR:HB	1:F:108:GLU:HG3	2.00	0.44
2:D:195:SER:HB3	2:D:202:HIS:HB2	1.99	0.44
2:D:436:LEU:HD11	2:D:447:LEU:HD11	1.98	0.44
2:D:3072:MET:O	2:D:3076:LYS:HD3	2.17	0.44
2:D:3250:TRP:HZ3	2:D:3256:ASN:HD21	1.66	0.44
2:D:4743:LEU:O	2:D:4746:ILE:HG12	2.18	0.44
2:B:706:TYR:HE2	2:B:838:ARG:NH1	2.16	0.44
2:B:1106:GLU:HB3	2:B:1214:ARG:HB2	1.98	0.44
2:B:1689:ILE:HG22	2:B:1794:MET:HE1	1.98	0.44
2:B:2657:TYR:CZ	2:B:2659:GLN:HB2	2.53	0.44
2:B:2926:LEU:HD22	2:B:3003:MET:HG3	2.00	0.44
2:B:3054:LYS:HB3	2:B:3058:ARG:NH1	2.33	0.44
2:B:3124:GLU:C	2:B:3126:VAL:H	2.26	0.44
2:B:3134:LEU:HB2	2:B:3162:PHE:CE2	2.53	0.44
2:B:3183:ILE:HA	2:B:3186:THR:OG1	2.18	0.44
2:B:3280:ILE:O	2:B:3284:ILE:HG23	2.17	0.44
2:B:4046:ARG:NH2	2:B:4049:HIS:HB3	2.33	0.44
2:B:4055:HIS:CE1	2:B:4057:HIS:HB2	2.53	0.44
2:C:262:TYR:HB2	2:C:389:ARG:HB3	2.00	0.44
3:L:92:VAL:HG23	3:L:93:PHE:CD1	2.51	0.44
2:A:3134:LEU:HB2	2:A:3162:PHE:CE2	2.53	0.44
2:A:4641:PRO:O	2:A:4647:LYS:NZ	2.49	0.44
1:E:22:THR:HB	1:E:108:GLU:HG3	2.00	0.44
2:D:1427:TYR:HB2	2:D:1563:VAL:HG11	2.00	0.44
2:D:1708:ASP:HA	2:D:1712:SER:HB2	2.00	0.44
2:D:1729:MET:N	2:D:2108:ILE:O	2.45	0.44
2:D:2436:ILE:HG22	2:D:2491:GLY:HA3	1.99	0.44
2:D:2844:MET:HE2	2:D:2844:MET:O	2.18	0.44
2:D:3664:LEU:O	2:D:3668:ILE:HG13	2.18	0.44
2:D:4943:MET:HE1	2:D:4950:GLU:HB2	2.00	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:139:SER:O	2:B:141:ASP:N	2.51	0.44
2:B:262:TYR:HB2	2:B:389:ARG:HB3	2.00	0.44
2:C:1694:MET:HE2	2:C:1694:MET:HB2	1.89	0.44
2:C:1707:ILE:HG23	2:C:1827:THR:HG21	2.00	0.44
2:C:2833:LEU:HD23	2:C:2837:LEU:CD2	2.48	0.44
2:C:3124:GLU:C	2:C:3126:VAL:H	2.26	0.44
2:C:4183:LYS:HB2	2:C:4183:LYS:HZ2	1.78	0.44
2:C:4563:GLU:OE1	2:C:4568:MET:HB2	2.17	0.44
2:A:313:ASN:OD1	2:A:314:LEU:N	2.51	0.43
2:A:463:PHE:HZ	2:A:489:PHE:HD2	1.66	0.43
2:A:988:LEU:HG	2:A:1051:ARG:HH21	1.83	0.43
2:A:2325:ILE:HB	2:B:207:PHE:CE1	2.53	0.43
2:A:2844:MET:HE2	2:A:2844:MET:O	2.18	0.43
2:A:2961:LYS:HD3	2:A:2961:LYS:HA	1.79	0.43
2:D:313:ASN:OD1	2:D:314:LEU:N	2.51	0.43
2:D:2979:ARG:HH12	2:D:3038:GLN:HB3	1.82	0.43
2:D:3101:LEU:HG	2:D:3105:LEU:HD12	2.00	0.43
2:D:3325:LYS:HG2	2:D:3329:LYS:HE2	2.00	0.43
2:B:2554:ARG:NH1	2:B:2554:ARG:O	2.50	0.43
2:B:3045:VAL:O	2:B:3054:LYS:NZ	2.46	0.43
2:C:520:ARG:C	2:C:523:GLY:H	2.26	0.43
2:C:706:TYR:HE2	2:C:838:ARG:NH1	2.16	0.43
2:C:1124:PRO:HD2	2:C:1594:VAL:HG13	2.00	0.43
2:C:1477:HIS:ND1	2:C:1478:GLU:HG2	2.33	0.43
2:C:1649:GLU:HG2	2:C:1650:LEU:N	2.33	0.43
2:C:1689:ILE:HG23	2:C:1703:TYR:CE1	2.52	0.43
2:C:1895:GLN:OE1	2:C:2068:ARG:NH1	2.46	0.43
2:C:1940:GLN:OE1	2:C:3608:LEU:HB3	2.18	0.43
2:C:4943:MET:HE1	2:C:4950:GLU:HB2	2.00	0.43
3:L:50:GLN:HA	3:L:53:ILE:HG13	2.00	0.43
2:A:428:ARG:NH2	2:A:448:PRO:HG3	2.33	0.43
2:A:1757:LEU:HD21	2:A:2113:VAL:HG13	2.00	0.43
2:A:2657:TYR:CZ	2:A:2659:GLN:HB2	2.53	0.43
2:A:2979:ARG:HH12	2:A:3038:GLN:HB3	1.82	0.43
2:A:3183:ILE:HA	2:A:3186:THR:OG1	2.18	0.43
2:A:3215:MET:HA	2:A:3215:MET:CE	2.48	0.43
2:D:3124:GLU:C	2:D:3126:VAL:H	2.26	0.43
2:D:3183:ILE:HA	2:D:3186:THR:OG1	2.18	0.43
2:B:1427:TYR:HB2	2:B:1563:VAL:HG11	2.00	0.43
2:B:1966:ARG:NH1	3:J:111:THR:OG1	2.51	0.43
2:B:3254:PRO:HD3	2:B:3266:THR:O	2.18	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:313:ASN:OD1	2:C:314:LEU:N	2.51	0.43
2:C:2892:ILE:HG23	2:C:2893:LEU:HD22	2.01	0.43
2:C:3054:LYS:HB3	2:C:3058:ARG:NH1	2.33	0.43
2:C:4046:ARG:NH2	2:C:4049:HIS:HB3	2.33	0.43
2:A:2833:LEU:HD23	2:A:2837:LEU:CD2	2.48	0.43
2:A:2870:LEU:HD22	2:A:2877:LEU:HG	1.98	0.43
2:A:3060:PHE:HZ	2:A:3104:MET:CE	2.31	0.43
2:A:3254:PRO:HD3	2:A:3266:THR:O	2.18	0.43
2:A:4046:ARG:NH2	2:A:4049:HIS:HB3	2.33	0.43
2:A:4520:TYR:HD1	2:A:4561:LEU:HD13	1.83	0.43
3:I:20:PHE:O	3:I:22:LYS:HG2	2.19	0.43
3:I:112:ASN:HB3	3:I:116:LYS:H	1.83	0.43
2:D:125:TYR:CE1	2:D:417:ARG:HD3	2.52	0.43
2:D:520:ARG:C	2:D:523:GLY:H	2.26	0.43
2:D:1962:THR:HG23	2:D:1966:ARG:NE	2.30	0.43
2:D:2134:MET:HE2	2:D:2134:MET:HB2	1.87	0.43
2:D:2833:LEU:HD23	2:D:2837:LEU:CD2	2.48	0.43
2:D:4520:TYR:HD1	2:D:4561:LEU:HD13	1.83	0.43
2:D:4848:ILE:HD11	2:C:4818:TYR:HA	2.00	0.43
2:B:1940:GLN:OE1	2:B:3608:LEU:HB3	2.18	0.43
2:B:2582:PRO:HD2	2:B:2630:PHE:HD1	1.81	0.43
2:B:2892:ILE:HG23	2:B:2893:LEU:HD22	2.00	0.43
2:C:1022:GLN:HA	2:C:1030:PRO:HD3	2.00	0.43
2:C:2934:ASP:O	2:C:2938:GLN:OE1	2.37	0.43
2:C:3182:SER:O	2:C:3186:THR:HG23	2.19	0.43
3:K:28:ILE:O	3:K:63:THR:HA	2.19	0.43
3:L:32:GLU:O	3:L:35:THR:OG1	2.31	0.43
2:A:2666:LEU:HB3	2:A:2667:PRO:HD3	1.99	0.43
2:A:3227:ARG:HD3	2:A:3290:ILE:HG21	2.00	0.43
2:A:3324:GLU:HG2	2:A:3328:LYS:HE2	1.99	0.43
2:A:3325:LYS:HG2	2:A:3329:LYS:HE2	2.00	0.43
2:D:893:TRP:O	2:D:897:LYS:HG2	2.17	0.43
2:D:988:LEU:HG	2:D:1051:ARG:HH21	1.83	0.43
2:D:1176:THR:HG22	2:D:1181:ILE:HG13	2.01	0.43
2:D:1989:PRO:O	2:D:1993:ARG:HG3	2.18	0.43
2:D:2179:LEU:O	2:D:2183:GLU:HB2	2.18	0.43
2:D:2934:ASP:O	2:D:2938:GLN:OE1	2.37	0.43
2:D:3324:GLU:HG2	2:D:3328:LYS:HE2	1.99	0.43
2:D:4735:ASN:HB3	2:D:4738:PHE:CD2	2.53	0.43
2:B:1118:SER:HB3	2:B:1204:VAL:HG11	2.01	0.43
2:B:1176:THR:HG22	2:B:1181:ILE:HG13	2.01	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:1417:TYR:O	2:B:1421:MET:HG2	2.18	0.43
2:B:2730:ASP:C	2:B:2734:MET:HE3	2.44	0.43
2:B:2833:LEU:HD23	2:B:2837:LEU:CD2	2.48	0.43
2:B:2939:TYR:O	2:B:2943:PHE:CD1	2.68	0.43
2:B:3131:TYR:HE1	2:B:3166:PHE:CZ	2.19	0.43
2:B:3664:LEU:O	2:B:3668:ILE:HG13	2.18	0.43
2:B:3890:TRP:O	2:C:76:ARG:NE	2.49	0.43
2:C:195:SER:HB3	2:C:202:HIS:HB2	1.99	0.43
2:C:988:LEU:HG	2:C:1051:ARG:HH21	1.83	0.43
2:C:1118:SER:HB3	2:C:1204:VAL:HG11	2.01	0.43
2:C:2641:SER:HB3	2:C:2676:LEU:HD21	1.99	0.43
2:C:3324:GLU:HG2	2:C:3328:LYS:HE2	1.99	0.43
3:L:20:PHE:O	3:L:22:LYS:HG2	2.19	0.43
1:H:36:LYS:HB2	2:D:647:ARG:HH12	1.84	0.43
2:A:195:SER:HB3	2:A:202:HIS:HB2	1.99	0.43
2:A:953:SER:OG	2:A:954:ASP:N	2.51	0.43
2:A:1962:THR:HA	2:A:1965:PHE:HD2	1.84	0.43
2:A:1989:PRO:O	2:A:1993:ARG:HG3	2.18	0.43
2:A:2554:ARG:NH1	2:A:2554:ARG:O	2.50	0.43
2:A:2678:PRO:HB2	2:A:2981:TYR:CD2	2.54	0.43
2:A:3239:LEU:HA	2:A:3239:LEU:HD23	1.85	0.43
2:D:139:SER:O	2:D:141:ASP:N	2.51	0.43
2:D:1417:TYR:O	2:D:1421:MET:HG2	2.18	0.43
2:D:2582:PRO:HA	2:D:2585:MET:HE1	2.00	0.43
2:D:2678:PRO:HB2	2:D:2981:TYR:CD2	2.54	0.43
2:D:3060:PHE:HZ	2:D:3104:MET:CE	2.31	0.43
2:B:463:PHE:HZ	2:B:489:PHE:HD2	1.66	0.43
2:C:2926:LEU:HD22	2:C:3003:MET:HG3	2.00	0.43
2:C:3060:PHE:HZ	2:C:3104:MET:CE	2.31	0.43
2:C:4620:GLN:OE1	2:C:4632:ARG:NH2	2.35	0.43
3:L:20:PHE:O	3:L:22:LYS:NZ	2.49	0.43
2:A:2179:LEU:O	2:A:2183:GLU:HB2	2.18	0.43
2:A:3124:GLU:C	2:A:3126:VAL:H	2.26	0.43
2:A:3743:THR:HB	2:A:3758:THR:HG21	2.01	0.43
2:A:4046:ARG:HH22	2:A:4049:HIS:CG	2.36	0.43
2:A:4710:LEU:HD12	2:D:4256:MET:HE3	2.01	0.43
3:I:20:PHE:O	3:I:22:LYS:NZ	2.49	0.43
2:D:242:ASP:OD1	2:D:243:GLU:N	2.49	0.43
2:D:1689:ILE:HG23	2:D:1703:TYR:HE1	1.84	0.43
2:D:1962:THR:HA	2:D:1965:PHE:HD2	1.84	0.43
2:D:2776:LYS:O	2:D:2780:LYS:HG2	2.18	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:3134:LEU:HB2	2:D:3162:PHE:CE2	2.53	0.43
2:D:4055:HIS:CE1	2:D:4057:HIS:HB2	2.53	0.43
2:B:313:ASN:OD1	2:B:314:LEU:N	2.51	0.43
2:B:681:HIS:HB3	2:B:799:LYS:HB2	2.01	0.43
2:B:1962:THR:HA	2:B:1965:PHE:HD2	1.84	0.43
2:B:2179:LEU:O	2:B:2183:GLU:HB2	2.18	0.43
2:B:2678:PRO:HB2	2:B:2981:TYR:CD2	2.54	0.43
2:B:4238:ILE:HG12	2:C:4624:ASP:HB3	2.01	0.43
2:B:4757:LEU:HD23	2:B:4757:LEU:HA	1.90	0.43
2:C:681:HIS:HB3	2:C:799:LYS:HB2	2.01	0.43
2:C:1962:THR:HA	2:C:1965:PHE:HD2	1.84	0.43
2:C:2854:LYS:HA	2:C:2854:LYS:HD2	1.66	0.43
2:C:3254:PRO:HD3	2:C:3266:THR:O	2.18	0.43
2:C:3280:ILE:O	2:C:3284:ILE:HG23	2.18	0.43
2:C:3743:THR:HB	2:C:3758:THR:HG21	2.01	0.43
2:C:3790:PHE:HE1	2:C:3858:LEU:HD23	1.82	0.43
2:C:4046:ARG:HH22	2:C:4049:HIS:CG	2.36	0.43
2:C:4120:GLU:HA	2:C:4123:GLU:HG2	1.98	0.43
2:A:137:ARG:NH1	2:A:202:HIS:HD1	2.17	0.43
2:A:467:ASP:O	2:A:475:LYS:NZ	2.37	0.43
2:A:706:TYR:HE2	2:A:838:ARG:NH1	2.16	0.43
2:A:1118:SER:HB3	2:A:1204:VAL:HG11	2.01	0.43
2:A:1269:GLU:HB2	2:A:1288:LYS:HG3	2.01	0.43
2:A:1707:ILE:HG23	2:A:1827:THR:HG21	2.00	0.43
2:A:2730:ASP:C	2:A:2734:MET:HE3	2.44	0.43
3:I:77:MET:HE3	3:I:77:MET:C	2.44	0.43
2:D:227:TYR:CG	2:D:352:SER:HB2	2.54	0.43
2:D:1022:GLN:HA	2:D:1030:PRO:HD3	2.00	0.43
2:D:2322:ARG:HA	2:D:2325:ILE:HG12	2.01	0.43
2:D:2638:LEU:HD23	2:D:2638:LEU:HA	1.86	0.43
2:D:3830:LEU:HD23	2:D:3908:LYS:HB3	2.00	0.43
2:B:137:ARG:NH1	2:B:202:HIS:HD1	2.17	0.43
2:B:1757:LEU:HD21	2:B:2113:VAL:HG13	2.00	0.43
2:B:3060:PHE:HZ	2:B:3104:MET:CE	2.31	0.43
2:B:3101:LEU:HG	2:B:3105:LEU:HD12	2.00	0.43
2:B:3215:MET:HA	2:B:3215:MET:CE	2.47	0.43
2:B:4256:MET:HE1	2:C:4706:GLN:HB2	2.01	0.43
2:C:227:TYR:CG	2:C:352:SER:HB2	2.54	0.43
2:C:953:SER:OG	2:C:954:ASP:N	2.51	0.43
2:C:1689:ILE:HG23	2:C:1703:TYR:HE1	1.84	0.43
2:C:2730:ASP:C	2:C:2734:MET:HE3	2.44	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:2776:LYS:O	2:C:2780:LYS:HG2	2.18	0.43
2:C:2884:LYS:HD3	2:C:2885:ASP:OD1	2.19	0.43
2:C:3325:LYS:HG2	2:C:3329:LYS:HE2	2.01	0.43
3:J:50:GLN:HA	3:J:53:ILE:HG13	2.00	0.43
2:A:2776:LYS:O	2:A:2780:LYS:HG2	2.18	0.43
2:A:2934:ASP:O	2:A:2938:GLN:OE1	2.37	0.43
2:A:3664:LEU:O	2:A:3668:ILE:HG13	2.18	0.43
2:A:4943:MET:HE1	2:A:4950:GLU:HB2	2.00	0.43
2:D:706:TYR:HE2	2:D:838:ARG:NH1	2.16	0.43
2:D:1124:PRO:HD2	2:D:1594:VAL:HG13	2.00	0.43
2:D:3311:LYS:HG3	2:D:3314:LEU:H	1.84	0.43
2:D:4046:ARG:HH22	2:D:4049:HIS:CG	2.36	0.43
2:D:4046:ARG:NH2	2:D:4049:HIS:HB3	2.33	0.43
2:D:4270:LYS:HE2	2:D:4270:LYS:HB2	1.83	0.43
2:B:1707:ILE:HG23	2:B:1827:THR:HG21	2.00	0.43
2:B:1714:TYR:OH	2:B:1718:ARG:NH1	2.52	0.43
2:B:4046:ARG:HH22	2:B:4049:HIS:CG	2.36	0.43
2:C:137:ARG:NH1	2:C:202:HIS:HD1	2.17	0.43
3:J:20:PHE:O	3:J:22:LYS:HG2	2.19	0.43
3:K:37:MET:HG3	3:K:42:GLN:HE21	1.83	0.43
3:L:37:MET:HG3	3:L:42:GLN:HE21	1.83	0.43
3:L:77:MET:HE3	3:L:77:MET:C	2.44	0.43
2:A:4270:LYS:HE2	2:A:4270:LYS:HB2	1.83	0.43
2:A:4861:ILE:HG21	2:D:4756:ILE:HG23	2.00	0.43
2:D:1724:GLU:OE2	2:D:2127:ARG:NH2	2.40	0.43
2:D:1757:LEU:HD21	2:D:2113:VAL:HG13	2.00	0.43
2:D:2657:TYR:CZ	2:D:2659:GLN:HB2	2.53	0.43
2:D:2847:ASN:O	2:D:2847:ASN:ND2	2.51	0.43
2:D:3045:VAL:O	2:D:3054:LYS:NZ	2.46	0.43
2:B:1124:PRO:HD2	2:B:1594:VAL:HG13	2.00	0.43
2:B:2847:ASN:O	2:B:2847:ASN:ND2	2.51	0.43
2:B:3009:CYS:O	2:B:3013:VAL:HG23	2.19	0.43
2:B:3182:SER:O	2:B:3186:THR:HG23	2.19	0.43
2:C:1417:TYR:O	2:C:1421:MET:HG2	2.18	0.43
2:C:2322:ARG:HA	2:C:2325:ILE:HG12	2.01	0.43
2:C:4089:GLU:HB2	2:C:4090:PRO:HD3	2.01	0.43
2:C:4743:LEU:O	2:C:4746:ILE:HG12	2.18	0.43
3:J:112:ASN:HB3	3:J:116:LYS:H	1.84	0.43
2:A:114:LEU:HB2	2:A:117:HIS:HD2	1.83	0.43
2:A:1499:GLY:HA3	2:D:2824:ARG:NH2	2.34	0.43
2:A:1718:ARG:HD3	2:A:1830:ILE:O	2.19	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:1962:THR:HG23	2:A:1966:ARG:NE	2.30	0.43
2:A:2856:LYS:O	2:A:2860:LEU:HG	2.19	0.43
2:A:4862:ILE:HD13	2:B:4852:PHE:HE1	1.84	0.43
3:I:50:GLN:HA	3:I:53:ILE:HG13	2.00	0.43
2:D:2847:ASN:C	2:D:2847:ASN:HD22	2.26	0.43
2:D:2961:LYS:HD3	2:D:2961:LYS:HA	1.79	0.43
2:D:3009:CYS:O	2:D:3013:VAL:HG23	2.19	0.43
2:D:3054:LYS:HB3	2:D:3058:ARG:NH1	2.33	0.43
2:B:227:TYR:CG	2:B:352:SER:HB2	2.54	0.43
2:B:1022:GLN:HA	2:B:1030:PRO:HD3	2.00	0.43
2:B:2776:LYS:O	2:B:2780:LYS:HG2	2.18	0.43
2:B:3316:LYS:O	2:B:3317:THR:OG1	2.31	0.43
2:C:2886:ARG:O	2:C:2887:GLU:C	2.61	0.43
2:C:3014:LEU:O	2:C:3018:ARG:HD2	2.19	0.43
2:C:3183:ILE:HA	2:C:3186:THR:OG1	2.18	0.43
2:C:3664:LEU:O	2:C:3668:ILE:HG13	2.18	0.43
2:C:3997:LYS:HD3	2:C:4109:MET:HE1	2.01	0.43
1:H:85:ALA:O	1:H:94:PRO:HB3	2.19	0.42
2:A:227:TYR:CG	2:A:352:SER:HB2	2.54	0.42
2:A:370:LEU:HB2	2:A:393:MET:HE2	2.01	0.42
2:A:520:ARG:C	2:A:523:GLY:H	2.26	0.42
2:A:681:HIS:HB3	2:A:799:LYS:HB2	2.01	0.42
2:A:930:ASN:HA	2:A:933:LEU:HD12	2.01	0.42
2:A:1427:TYR:HB2	2:A:1563:VAL:HG11	2.00	0.42
2:A:2250:ASN:HB3	2:A:2253:LEU:HB2	2.01	0.42
2:A:3054:LYS:HB3	2:A:3058:ARG:NH1	2.33	0.42
2:A:3830:LEU:HD23	2:A:3908:LYS:HB3	2.00	0.42
2:A:4735:ASN:HB3	2:A:4738:PHE:CD2	2.53	0.42
2:A:4743:LEU:O	2:A:4746:ILE:HG12	2.18	0.42
1:E:80:ASP:OD1	1:E:81:VAL:N	2.52	0.42
3:I:33:LEU:HD21	3:I:53:ILE:HD13	2.01	0.42
2:D:262:TYR:HB2	2:D:389:ARG:HB3	2.00	0.42
2:D:695:VAL:O	2:D:727:PHE:N	2.51	0.42
2:D:706:TYR:HE1	2:D:1254:ARG:HH11	1.67	0.42
2:D:1118:SER:HB3	2:D:1204:VAL:HG11	2.01	0.42
2:D:1276:THR:OG1	2:D:1278:ASP:OD1	2.33	0.42
2:D:1707:ILE:HG23	2:D:1827:THR:HG21	2.00	0.42
2:D:1718:ARG:HD3	2:D:1830:ILE:O	2.19	0.42
2:D:1989:PRO:HB2	2:D:1991:GLU:OE1	2.19	0.42
2:D:3215:MET:HA	2:D:3215:MET:CE	2.48	0.42
2:D:4864:GLY:CA	2:C:4867:ILE:HG12	2.48	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:370:LEU:HB2	2:B:393:MET:HE2	2.01	0.42
2:B:953:SER:OG	2:B:954:ASP:N	2.51	0.42
2:B:1708:ASP:HA	2:B:1712:SER:HB2	2.00	0.42
2:B:2741:TRP:CD1	2:B:2752:LYS:HE2	2.54	0.42
2:B:4269:LYS:HA	2:B:4272:LYS:HG2	2.01	0.42
2:B:4753:LEU:HD21	2:C:4773:LEU:HD13	2.00	0.42
2:C:1714:TYR:OH	2:C:1718:ARG:NH1	2.52	0.42
2:C:3101:LEU:HG	2:C:3105:LEU:HD12	2.00	0.42
2:C:3830:LEU:HD23	2:C:3908:LYS:HB3	2.00	0.42
2:C:4055:HIS:CE1	2:C:4057:HIS:HB2	2.53	0.42
2:A:969:ASN:OD1	2:A:970:TYR:N	2.50	0.42
2:A:1088:PHE:HB2	2:A:1205:CYS:SG	2.59	0.42
2:A:1714:TYR:OH	2:A:1718:ARG:NH1	2.52	0.42
2:A:2290:TRP:CZ2	2:A:2292:PRO:HG3	2.54	0.42
2:A:2832:THR:HG21	2:B:1290:PHE:CE2	2.54	0.42
2:A:3009:CYS:O	2:A:3013:VAL:HG23	2.19	0.42
2:A:3109:PHE:O	2:A:3165:ALA:HB2	2.19	0.42
2:A:4774:LEU:O	2:A:4778:VAL:HG23	2.20	0.42
2:D:26:ALA:O	2:D:33:GLN:N	2.51	0.42
2:D:173:GLU:HA	2:C:3939:ARG:HH22	1.84	0.42
2:D:614:LEU:HD23	2:D:617:LEU:HD12	2.01	0.42
2:D:681:HIS:HB3	2:D:799:LYS:HB2	2.01	0.42
2:D:2722:ASN:O	2:D:2726:GLU:OE1	2.37	0.42
2:D:3594:GLN:HB3	2:D:3595:ARG:H	1.54	0.42
2:D:4269:LYS:HA	2:D:4272:LYS:HG2	2.01	0.42
2:D:4774:LEU:O	2:D:4778:VAL:HG23	2.19	0.42
2:B:2844:MET:HE2	2:B:2844:MET:O	2.18	0.42
2:B:2847:ASN:HD22	2:B:2847:ASN:C	2.27	0.42
2:B:3014:LEU:O	2:B:3018:ARG:HD2	2.19	0.42
2:B:3325:LYS:HG2	2:B:3329:LYS:HE2	2.01	0.42
2:B:4089:GLU:HB2	2:B:4090:PRO:HD3	2.01	0.42
2:B:4943:MET:HE1	2:B:4950:GLU:HB2	2.00	0.42
2:C:946:LEU:HD12	2:C:948:CYS:SG	2.60	0.42
2:C:1697:LEU:HD23	2:C:1697:LEU:HA	1.87	0.42
2:C:2150:MET:HE1	2:C:2199:PHE:HA	2.01	0.42
2:C:4774:LEU:O	2:C:4778:VAL:HG23	2.20	0.42
2:A:706:TYR:HE1	2:A:1254:ARG:HH11	1.67	0.42
2:A:882:ARG:HG3	2:A:937:LEU:HD23	2.02	0.42
2:A:1499:GLY:HA3	2:D:2824:ARG:HH21	1.83	0.42
2:A:2582:PRO:HA	2:A:2585:MET:HE1	2.00	0.42
2:A:2867:ASN:ND2	2:A:2867:ASN:C	2.78	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:2884:LYS:HD3	2:A:2885:ASP:OD1	2.19	0.42
3:I:28:ILE:O	3:I:63:THR:HA	2.19	0.42
2:D:675:TYR:CE1	2:D:790:PRO:HB3	2.54	0.42
2:D:997:ASP:HA	2:D:1047:LYS:NZ	2.35	0.42
2:D:2150:MET:HE1	2:D:2199:PHE:HA	2.01	0.42
2:D:2290:TRP:CZ2	2:D:2292:PRO:HG3	2.55	0.42
2:D:2892:ILE:HG23	2:D:2893:LEU:HD22	2.01	0.42
2:D:3182:SER:O	2:D:3186:THR:HG23	2.19	0.42
2:D:3242:LEU:HB3	2:D:3276:LEU:HD11	2.01	0.42
2:B:930:ASN:HA	2:B:933:LEU:HD12	2.00	0.42
2:B:946:LEU:HD12	2:B:948:CYS:SG	2.60	0.42
2:B:2856:LYS:O	2:B:2860:LEU:HG	2.19	0.42
2:B:2884:LYS:HD3	2:B:2885:ASP:OD1	2.19	0.42
2:B:3109:PHE:O	2:B:3165:ALA:HB2	2.19	0.42
2:B:3830:LEU:HD23	2:B:3908:LYS:HB3	2.00	0.42
2:C:131:CYS:SG	2:C:150:GLN:HB2	2.60	0.42
2:C:251:GLU:HB2	2:C:256:GLN:NE2	2.35	0.42
2:C:614:LEU:HD23	2:C:617:LEU:HD12	2.01	0.42
2:C:1269:GLU:HB2	2:C:1288:LYS:HG3	2.01	0.42
2:C:1718:ARG:HD3	2:C:1830:ILE:O	2.19	0.42
2:C:1989:PRO:HB2	2:C:1991:GLU:OE1	2.19	0.42
2:C:2134:MET:HE2	2:C:2134:MET:HB2	1.87	0.42
2:C:2290:TRP:CZ2	2:C:2292:PRO:HG3	2.54	0.42
2:C:2582:PRO:HA	2:C:2585:MET:HE1	2.00	0.42
2:C:2722:ASN:O	2:C:2726:GLU:OE1	2.37	0.42
2:C:2856:LYS:O	2:C:2860:LEU:HG	2.19	0.42
2:C:2968:LEU:HB2	2:C:2969:PRO:HD3	2.02	0.42
2:C:3001:LYS:NZ	2:C:3041:ASP:OD2	2.48	0.42
2:C:3102:LEU:HB2	2:C:3103:PRO:HD3	2.02	0.42
2:C:3311:LYS:HG3	2:C:3314:LEU:H	1.84	0.42
3:J:72:MET:O	3:J:75:ARG:HG2	2.19	0.42
3:J:77:MET:C	3:J:77:MET:HE3	2.44	0.42
3:K:77:MET:HE3	3:K:77:MET:C	2.44	0.42
2:A:251:GLU:HB2	2:A:256:GLN:NE2	2.35	0.42
2:A:915:HIS:CE1	2:A:917:CYS:HG	2.37	0.42
2:A:1304:LEU:HD12	2:A:1541:PRO:HB2	2.01	0.42
2:A:1689:ILE:HG23	2:A:1703:TYR:HE1	1.84	0.42
2:A:2057:THR:HB	2:A:2060:GLN:HG3	2.01	0.42
2:A:2641:SER:HB3	2:A:2676:LEU:HD21	1.99	0.42
2:A:3101:LEU:HG	2:A:3105:LEU:HD12	2.00	0.42
1:F:80:ASP:OD1	1:F:81:VAL:N	2.52	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:85:ALA:O	1:F:94:PRO:HB3	2.19	0.42
2:D:137:ARG:NH1	2:D:202:HIS:HD1	2.17	0.42
2:D:233:VAL:HG21	2:D:413:SER:HB2	2.01	0.42
2:D:882:ARG:HG3	2:D:937:LEU:HD23	2.02	0.42
2:D:930:ASN:HA	2:D:933:LEU:HD12	2.00	0.42
2:D:1258:PHE:CD1	2:D:1303:ARG:HG2	2.55	0.42
2:D:3014:LEU:O	2:D:3018:ARG:HD2	2.19	0.42
2:B:1269:GLU:HB2	2:B:1288:LYS:HG3	2.01	0.42
2:B:1689:ILE:HG23	2:B:1703:TYR:HE1	1.84	0.42
2:B:1989:PRO:O	2:B:1993:ARG:HG3	2.18	0.42
2:B:3102:LEU:HB2	2:B:3103:PRO:HD3	2.02	0.42
2:C:882:ARG:HG3	2:C:937:LEU:HD23	2.02	0.42
2:C:1258:PHE:CD1	2:C:1303:ARG:HG2	2.55	0.42
2:C:1708:ASP:HA	2:C:1712:SER:HB2	2.00	0.42
2:C:1906:MET:HE3	2:C:1906:MET:HB3	1.87	0.42
2:C:2741:TRP:CD1	2:C:2752:LYS:HE2	2.54	0.42
1:H:91:VAL:HG21	2:D:1768:PHE:CE1	2.54	0.42
2:A:262:TYR:HB2	2:A:389:ARG:HB3	2.00	0.42
2:A:1417:TYR:O	2:A:1421:MET:HG2	2.18	0.42
2:A:1708:ASP:HA	2:A:1712:SER:HB2	2.00	0.42
1:E:85:ALA:O	1:E:94:PRO:HB3	2.19	0.42
1:G:80:ASP:OD1	1:G:81:VAL:N	2.52	0.42
3:I:72:MET:O	3:I:75:ARG:HG2	2.19	0.42
2:D:131:CYS:SG	2:D:150:GLN:HB2	2.60	0.42
2:D:173:GLU:HA	2:C:3939:ARG:NH2	2.35	0.42
2:D:251:GLU:HB2	2:D:256:GLN:NE2	2.35	0.42
2:D:2250:ASN:HB3	2:D:2253:LEU:HB2	2.01	0.42
2:D:2657:TYR:CE2	2:D:2659:GLN:HB2	2.55	0.42
2:D:2773:TRP:CE3	2:D:2773:TRP:HA	2.55	0.42
2:D:3109:PHE:O	2:D:3165:ALA:HB2	2.19	0.42
2:B:1304:LEU:HD12	2:B:1541:PRO:HB2	2.02	0.42
2:B:1718:ARG:HD3	2:B:1830:ILE:O	2.19	0.42
2:B:2057:THR:HB	2:B:2060:GLN:HG3	2.01	0.42
2:B:2085:PHE:HB3	2:B:3691:TYR:CE2	2.53	0.42
2:B:2934:ASP:O	2:B:2938:GLN:OE1	2.37	0.42
2:B:3242:LEU:HB3	2:B:3276:LEU:HD11	2.01	0.42
2:B:3324:GLU:HG2	2:B:3328:LYS:HE2	1.99	0.42
2:B:3743:THR:HB	2:B:3758:THR:HG21	2.01	0.42
2:C:997:ASP:HA	2:C:1047:LYS:NZ	2.34	0.42
2:C:2607:LEU:HD22	2:C:2664:LEU:HG	2.01	0.42
2:C:2844:MET:HE2	2:C:2844:MET:O	2.18	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:3166:PHE:CE2	2:C:3168:VAL:HB	2.48	0.42
1:H:80:ASP:OD1	1:H:81:VAL:N	2.52	0.42
2:A:614:LEU:HD23	2:A:617:LEU:HD12	2.02	0.42
2:A:675:TYR:CE1	2:A:790:PRO:HB3	2.54	0.42
2:A:1176:THR:HG22	2:A:1181:ILE:HG13	2.01	0.42
2:A:2741:TRP:CD1	2:A:2752:LYS:HE2	2.54	0.42
2:A:3014:LEU:O	2:A:3018:ARG:HD2	2.19	0.42
2:A:3127:GLN:HG3	2:A:3183:ILE:HB	2.02	0.42
2:A:3131:TYR:HE1	2:A:3166:PHE:CZ	2.19	0.42
1:G:85:ALA:O	1:G:94:PRO:HB3	2.19	0.42
2:D:989:THR:HG22	2:D:991:SER:H	1.85	0.42
2:D:1088:PHE:HB2	2:D:1205:CYS:SG	2.60	0.42
2:D:1833:ILE:O	2:D:1835:HIS:ND1	2.53	0.42
2:D:3729:ALA:O	2:D:3733:ASP:HB2	2.19	0.42
2:D:4002:MET:HE3	2:D:4002:MET:HB3	1.99	0.42
2:B:233:VAL:HG21	2:B:413:SER:HB2	2.01	0.42
2:B:614:LEU:HD23	2:B:617:LEU:HD12	2.01	0.42
2:B:956:HIS:O	2:B:960:LYS:HG3	2.20	0.42
2:B:1989:PRO:HB2	2:B:1991:GLU:OE1	2.19	0.42
2:B:2264:LYS:HE2	2:B:2264:LYS:HB2	1.79	0.42
2:B:2407:HIS:ND1	2:B:2408:LEU:HG	2.35	0.42
2:B:3010:LYS:O	2:B:3014:LEU:HD23	2.20	0.42
2:C:1176:THR:HG22	2:C:1181:ILE:HG13	2.01	0.42
2:C:2407:HIS:ND1	2:C:2408:LEU:HG	2.35	0.42
2:C:2678:PRO:HB2	2:C:2981:TYR:CD2	2.54	0.42
2:C:3009:CYS:O	2:C:3013:VAL:HG23	2.19	0.42
2:C:4269:LYS:HA	2:C:4272:LYS:HG2	2.01	0.42
3:K:50:GLN:HA	3:K:53:ILE:HG13	2.00	0.42
2:A:946:LEU:HD12	2:A:948:CYS:SG	2.60	0.42
2:A:989:THR:HG22	2:A:991:SER:H	1.85	0.42
2:A:1124:PRO:HD2	2:A:1594:VAL:HG13	2.00	0.42
2:A:1304:LEU:HD23	2:A:1304:LEU:HA	1.91	0.42
2:A:1599:MET:HE3	2:A:1599:MET:HB2	1.91	0.42
2:A:1825:PHE:CE1	2:A:1842:ILE:HG12	2.55	0.42
2:A:1833:ILE:O	2:A:1835:HIS:ND1	2.53	0.42
2:A:1989:PRO:HB2	2:A:1991:GLU:OE1	2.19	0.42
2:A:2892:ILE:HG23	2:A:2893:LEU:HD22	2.01	0.42
2:A:4269:LYS:HA	2:A:4272:LYS:HG2	2.01	0.42
2:D:2730:ASP:C	2:D:2734:MET:HE3	2.44	0.42
2:D:2968:LEU:HB2	2:D:2969:PRO:HD3	2.02	0.42
2:B:251:GLU:HB2	2:B:256:GLN:NE2	2.35	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:718:VAL:HG23	2:B:793:SER:HB3	2.01	0.42
2:B:882:ARG:HG3	2:B:937:LEU:HD23	2.02	0.42
2:B:3166:PHE:CE2	2:B:3168:VAL:HB	2.48	0.42
2:B:3311:LYS:HG3	2:B:3314:LEU:H	1.84	0.42
2:C:675:TYR:CE1	2:C:790:PRO:HB3	2.54	0.42
2:C:969:ASN:OD1	2:C:970:TYR:N	2.50	0.42
2:C:1757:LEU:HD21	2:C:2113:VAL:HG13	2.00	0.42
2:C:2773:TRP:HA	2:C:2773:TRP:CE3	2.55	0.42
2:C:3215:MET:HA	2:C:3215:MET:CE	2.48	0.42
2:C:3239:LEU:HD22	2:C:3280:ILE:HG12	2.01	0.42
2:C:3320:LEU:HD23	2:C:3320:LEU:HA	1.91	0.42
2:A:194:LEU:HD11	2:A:201:LEU:HD23	2.02	0.42
2:A:3182:SER:O	2:A:3186:THR:HG23	2.19	0.42
2:A:3997:LYS:HD3	2:A:4109:MET:HE1	2.02	0.42
2:A:4634:VAL:HG22	2:A:4640:PHE:CD1	2.55	0.42
2:D:946:LEU:HD12	2:D:948:CYS:SG	2.60	0.42
2:D:956:HIS:O	2:D:960:LYS:HG3	2.20	0.42
2:D:1599:MET:HE3	2:D:1599:MET:HB2	1.91	0.42
2:D:1714:TYR:OH	2:D:1718:ARG:NH1	2.52	0.42
2:D:2407:HIS:ND1	2:D:2408:LEU:HG	2.35	0.42
2:D:2726:GLU:HA	2:D:2760:TYR:HD1	1.85	0.42
2:D:2884:LYS:HD3	2:D:2885:ASP:OD1	2.19	0.42
2:D:3254:PRO:HD3	2:D:3266:THR:O	2.18	0.42
2:D:3667:LEU:HD21	2:D:3691:TYR:CD2	2.55	0.42
2:B:675:TYR:CE1	2:B:790:PRO:HB3	2.54	0.42
2:B:2607:LEU:HD22	2:B:2664:LEU:HG	2.01	0.42
2:B:2726:GLU:HA	2:B:2760:TYR:HD1	1.85	0.42
2:C:915:HIS:CE1	2:C:917:CYS:HG	2.36	0.42
2:C:1729:MET:N	2:C:2108:ILE:O	2.45	0.42
2:C:1825:PHE:CE1	2:C:1842:ILE:HG12	2.55	0.42
2:C:2847:ASN:O	2:C:2847:ASN:ND2	2.51	0.42
3:J:33:LEU:HD21	3:J:53:ILE:HD13	2.01	0.42
3:K:20:PHE:O	3:K:22:LYS:HG2	2.19	0.42
3:K:112:ASN:HB3	3:K:116:LYS:H	1.84	0.42
3:L:28:ILE:O	3:L:63:THR:HA	2.19	0.42
2:A:997:ASP:HA	2:A:1047:LYS:HZ1	1.84	0.42
2:A:3242:LEU:HB3	2:A:3276:LEU:HD11	2.01	0.42
2:A:3661:VAL:HB	2:A:3665:HIS:HB3	2.01	0.42
2:A:4748:MET:N	2:A:4748:MET:SD	2.93	0.42
2:A:4887:LYS:HZ3	2:A:4887:LYS:HG2	1.72	0.42
2:D:323:ASP:O	2:D:327:THR:OG1	2.33	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:2886:ARG:O	2:D:2887:GLU:C	2.61	0.42
2:D:3102:LEU:HB2	2:D:3103:PRO:HD3	2.02	0.42
2:D:3239:LEU:HD22	2:D:3280:ILE:HG12	2.01	0.42
2:D:4782:THR:HG22	2:D:4809:MET:HE1	2.02	0.42
2:B:1258:PHE:CD1	2:B:1303:ARG:HG2	2.55	0.42
2:B:1678:SER:HB2	2:B:1768:PHE:CE2	2.55	0.42
2:B:1825:PHE:CE1	2:B:1842:ILE:HG12	2.55	0.42
2:B:2250:ASN:HB3	2:B:2253:LEU:HB2	2.01	0.42
2:B:2290:TRP:CZ2	2:B:2292:PRO:HG3	2.54	0.42
2:B:2793:ARG:HG3	2:B:2794:GLU:N	2.35	0.42
2:B:2860:LEU:HA	2:B:2863:LYS:HZ3	1.85	0.42
2:B:2867:ASN:ND2	2:B:2867:ASN:C	2.78	0.42
2:B:3997:LYS:HD3	2:B:4109:MET:HE1	2.02	0.42
2:B:4056:LYS:HB2	2:C:4660:PHE:CE1	2.55	0.42
2:B:4774:LEU:O	2:B:4778:VAL:HG23	2.19	0.42
2:B:4867:ILE:HD13	2:C:4867:ILE:HD12	2.02	0.42
2:C:930:ASN:HA	2:C:933:LEU:HD12	2.00	0.42
2:C:2726:GLU:HA	2:C:2760:TYR:HD1	1.85	0.42
2:C:3010:LYS:O	2:C:3014:LEU:HD23	2.20	0.42
2:C:3109:PHE:O	2:C:3165:ALA:HB2	2.19	0.42
2:C:4270:LYS:HE2	2:C:4270:LYS:HB2	1.83	0.42
3:K:33:LEU:HD21	3:K:53:ILE:HD13	2.01	0.42
3:L:33:LEU:HD21	3:L:53:ILE:HD13	2.02	0.42
3:L:112:ASN:HB3	3:L:116:LYS:H	1.84	0.42
2:A:695:VAL:O	2:A:727:PHE:N	2.51	0.42
2:A:1022:GLN:HA	2:A:1030:PRO:HD3	2.00	0.42
2:A:1697:LEU:HD23	2:A:1697:LEU:HA	1.87	0.42
2:A:2407:HIS:ND1	2:A:2408:LEU:HG	2.35	0.42
2:A:2735:ASP:OD1	2:A:2736:LYS:N	2.53	0.42
2:A:3010:LYS:O	2:A:3014:LEU:HD23	2.20	0.42
2:A:4033:LYS:HA	2:A:4033:LYS:HD2	1.76	0.42
2:D:718:VAL:HG23	2:D:793:SER:HB3	2.01	0.42
2:D:966:LEU:HA	2:D:967:PRO:HD3	1.94	0.42
2:D:2793:ARG:HG3	2:D:2794:GLU:N	2.35	0.42
2:D:2867:ASN:ND2	2:D:2867:ASN:C	2.78	0.42
2:D:3010:LYS:O	2:D:3014:LEU:HD23	2.20	0.42
2:D:3029:ILE:O	2:D:3033:LEU:HD23	2.20	0.42
2:D:3743:THR:HB	2:D:3758:THR:HG21	2.01	0.42
2:B:1113:MET:SD	2:B:1211:GLN:HB3	2.60	0.42
2:B:2968:LEU:HB2	2:B:2969:PRO:HD3	2.02	0.42
2:B:3016:ARG:HH12	2:B:3064:ALA:HA	1.85	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:3029:ILE:O	2:B:3033:LEU:HD23	2.20	0.42
2:C:3242:LEU:HB3	2:C:3276:LEU:HD11	2.01	0.42
3:J:28:ILE:O	3:J:63:THR:HA	2.19	0.42
3:K:72:MET:O	3:K:75:ARG:HG2	2.19	0.42
2:A:23:GLN:HG2	2:A:36:CYS:SG	2.60	0.41
2:A:233:VAL:HG21	2:A:413:SER:HB2	2.01	0.41
2:A:1258:PHE:CD1	2:A:1303:ARG:HG2	2.55	0.41
2:A:2657:TYR:CE2	2:A:2659:GLN:HB2	2.55	0.41
2:A:2726:GLU:HA	2:A:2760:TYR:HD1	1.85	0.41
2:A:2793:ARG:HG3	2:A:2794:GLU:N	2.35	0.41
2:A:2886:ARG:O	2:A:2887:GLU:C	2.61	0.41
2:A:3029:ILE:O	2:A:3033:LEU:HD23	2.20	0.41
2:D:1269:GLU:HB2	2:D:1288:LYS:HG3	2.01	0.41
2:D:2856:LYS:O	2:D:2860:LEU:HG	2.19	0.41
2:D:3127:GLN:HG3	2:D:3183:ILE:HB	2.02	0.41
2:D:4258:MET:H	2:D:4258:MET:HG3	1.60	0.41
2:B:677:LEU:HD12	2:B:801:ARG:O	2.20	0.41
2:B:2722:ASN:O	2:B:2726:GLU:OE1	2.37	0.41
2:B:4237:SER:HB3	2:B:4240:THR:HG23	2.02	0.41
2:C:233:VAL:HG21	2:C:413:SER:HB2	2.01	0.41
2:C:2735:ASP:OD1	2:C:2736:LYS:N	2.53	0.41
2:C:3667:LEU:HD21	2:C:3691:TYR:CD2	2.55	0.41
2:C:4782:THR:HG22	2:C:4809:MET:HE1	2.02	0.41
2:C:4887:LYS:HZ3	2:C:4892:GLY:HA2	1.84	0.41
2:A:131:CYS:SG	2:A:150:GLN:HB2	2.60	0.41
2:A:1316:LYS:HD2	2:A:1316:LYS:HA	1.84	0.41
2:A:1678:SER:HB2	2:A:1768:PHE:CE2	2.55	0.41
2:A:2322:ARG:HA	2:A:2325:ILE:HG12	2.01	0.41
2:A:3311:LYS:HG3	2:A:3314:LEU:H	1.84	0.41
2:A:3729:ALA:O	2:A:3733:ASP:HB2	2.19	0.41
2:D:2741:TRP:CD1	2:D:2752:LYS:HE2	2.54	0.41
2:D:4089:GLU:HB2	2:D:4090:PRO:HD3	2.01	0.41
2:D:4634:VAL:HG22	2:D:4640:PHE:CD1	2.55	0.41
2:B:23:GLN:HG2	2:B:36:CYS:SG	2.60	0.41
2:B:706:TYR:HE1	2:B:1254:ARG:HH11	1.67	0.41
2:B:2150:MET:HE1	2:B:2199:PHE:HA	2.01	0.41
2:B:3234:VAL:HA	2:B:3238:ILE:HG12	2.02	0.41
2:B:3661:VAL:HB	2:B:3665:HIS:HB3	2.02	0.41
2:C:718:VAL:HG23	2:C:793:SER:HB3	2.01	0.41
2:C:1304:LEU:HD12	2:C:1541:PRO:HB2	2.02	0.41
2:C:3285:TYR:O	2:C:3325:LYS:NZ	2.53	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:915:HIS:CD2	2:A:916:PRO:HD2	2.50	0.41
2:A:3234:VAL:HA	2:A:3238:ILE:HG12	2.02	0.41
2:A:3285:TYR:O	2:A:3325:LYS:NZ	2.53	0.41
2:A:4084:VAL:O	2:A:4088:HIS:HB3	2.21	0.41
2:A:4173:ILE:HD13	2:A:4884:MET:HE2	2.02	0.41
2:A:4782:THR:HG22	2:A:4809:MET:HE1	2.02	0.41
2:A:4930:GLU:HA	2:A:4933:HIS:ND1	2.35	0.41
2:D:194:LEU:HD11	2:D:201:LEU:HD23	2.02	0.41
2:D:349:MET:HA	2:D:349:MET:HE3	2.03	0.41
2:D:370:LEU:HB2	2:D:393:MET:HE2	2.01	0.41
2:D:1113:MET:SD	2:D:1211:GLN:HB3	2.60	0.41
2:D:1678:SER:HB2	2:D:1768:PHE:CE2	2.55	0.41
2:D:2150:MET:O	2:D:2156:TYR:OH	2.33	0.41
2:D:3285:TYR:O	2:D:3325:LYS:NZ	2.53	0.41
2:D:3967:LEU:HD12	2:D:3967:LEU:HA	1.90	0.41
2:D:4748:MET:N	2:D:4748:MET:SD	2.93	0.41
2:B:168:GLN:HG2	2:B:169:ARG:HG2	2.03	0.41
2:B:349:MET:HA	2:B:349:MET:HE3	2.03	0.41
2:B:1017:THR:HB	2:B:1028:ARG:HG2	2.02	0.41
2:B:2789:ILE:HD11	2:B:2901:TYR:HB3	2.02	0.41
2:B:2886:ARG:O	2:B:2887:GLU:C	2.61	0.41
2:B:3594:GLN:HB3	2:B:3595:ARG:H	1.54	0.41
2:B:3667:LEU:HD21	2:B:3691:TYR:CD2	2.55	0.41
2:B:4084:VAL:O	2:B:4088:HIS:HB3	2.21	0.41
2:C:139:SER:O	2:C:140:THR:OG1	2.36	0.41
2:C:593:HIS:O	2:C:597:ILE:HG13	2.21	0.41
2:C:675:TYR:HB3	2:C:822:CYS:SG	2.60	0.41
2:C:677:LEU:HD12	2:C:801:ARG:O	2.20	0.41
2:C:706:TYR:HE1	2:C:1254:ARG:HH11	1.67	0.41
3:L:72:MET:O	3:L:75:ARG:HG2	2.19	0.41
2:A:168:GLN:HG2	2:A:169:ARG:HG2	2.03	0.41
2:A:1017:THR:HB	2:A:1028:ARG:HG2	2.02	0.41
2:A:2789:ILE:HD11	2:A:2901:TYR:HB3	2.02	0.41
2:A:2847:ASN:C	2:A:2847:ASN:HD22	2.27	0.41
2:A:2928:GLN:O	2:A:2931:ARG:HG2	2.21	0.41
2:A:3102:LEU:HB2	2:A:3103:PRO:HD3	2.02	0.41
2:A:3311:LYS:NZ	2:A:3313:GLN:HB2	2.33	0.41
2:A:4089:GLU:HB2	2:A:4090:PRO:HD3	2.01	0.41
2:A:4237:SER:HB3	2:A:4240:THR:HG23	2.02	0.41
1:F:3:VAL:HG22	1:F:77:CYS:HA	2.02	0.41
1:G:63:GLY:HA3	1:G:75:LEU:HD21	2.03	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:260:VAL:HG23	2:D:391:ALA:HB3	2.03	0.41
2:D:3236:GLU:CD	2:D:3298:ARG:HH21	2.29	0.41
2:B:131:CYS:SG	2:B:150:GLN:HB2	2.60	0.41
2:B:675:TYR:HB3	2:B:822:CYS:SG	2.60	0.41
2:B:2497:ARG:HD2	2:B:2872:VAL:HG21	2.02	0.41
2:B:3127:GLN:HG3	2:B:3183:ILE:HB	2.02	0.41
2:C:139:SER:O	2:C:141:ASP:N	2.51	0.41
2:C:1016:TRP:CE3	2:C:1029:ASN:HB2	2.56	0.41
2:C:1088:PHE:HB2	2:C:1205:CYS:SG	2.59	0.41
2:C:1678:SER:HB2	2:C:1768:PHE:CE2	2.55	0.41
2:C:2657:TYR:CE2	2:C:2659:GLN:HB2	2.55	0.41
2:C:3026:ALA:HA	2:C:3029:ILE:HD13	2.03	0.41
2:C:3311:LYS:NZ	2:C:3313:GLN:HB2	2.33	0.41
2:C:3661:VAL:HB	2:C:3665:HIS:HB3	2.02	0.41
3:L:13:PHE:CE1	3:L:73:MET:HE1	2.56	0.41
3:L:98:ASN:OD1	3:L:99:GLY:N	2.53	0.41
2:A:1113:MET:SD	2:A:1211:GLN:HB3	2.60	0.41
2:A:2722:ASN:O	2:A:2726:GLU:OE1	2.37	0.41
2:A:2925:PHE:HZ	2:A:2970:LEU:HD13	1.86	0.41
2:A:2968:LEU:HB2	2:A:2969:PRO:HD3	2.02	0.41
1:E:3:VAL:HG22	1:E:77:CYS:HA	2.02	0.41
2:D:364:GLN:HE21	2:D:369:GLY:C	2.28	0.41
2:D:1444:GLY:HA3	2:D:1487:MET:HA	2.03	0.41
2:D:1944:TYR:CE1	2:D:1948:MET:HE3	2.55	0.41
2:D:2057:THR:HB	2:D:2060:GLN:HG3	2.01	0.41
2:D:2264:LYS:HE2	2:D:2264:LYS:HB2	1.79	0.41
2:D:2720:PHE:HA	2:D:2723:LYS:HZ3	1.85	0.41
2:D:2847:ASN:HA	2:D:2850:ASN:HB2	2.03	0.41
2:D:3054:LYS:HB3	2:D:3058:ARG:HH12	1.86	0.41
2:D:3069:GLU:O	2:D:3072:MET:HB2	2.21	0.41
2:D:3997:LYS:HD3	2:D:4109:MET:HE1	2.01	0.41
2:B:1128:LEU:HD23	2:B:1128:LEU:HA	1.95	0.41
2:B:2322:ARG:HA	2:B:2325:ILE:HG12	2.01	0.41
2:B:2538:THR:O	2:B:2584:MET:HE1	2.21	0.41
2:B:2657:TYR:CE2	2:B:2659:GLN:HB2	2.55	0.41
2:B:2735:ASP:OD1	2:B:2736:LYS:N	2.53	0.41
2:B:4196:THR:O	2:B:4200:MET:HG3	2.21	0.41
2:B:4693:SER:O	2:B:4697:VAL:HG23	2.21	0.41
2:B:4748:MET:N	2:B:4748:MET:SD	2.93	0.41
2:B:4862:ILE:HD13	2:C:4852:PHE:HE1	1.84	0.41
2:B:4896:ASP:OD1	2:B:4897:TYR:N	2.54	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:370:LEU:HB2	2:C:393:MET:HE2	2.01	0.41
2:C:602:ASP:HA	2:C:642:LEU:HD21	2.03	0.41
2:C:1113:MET:SD	2:C:1211:GLN:HB3	2.60	0.41
2:C:1833:ILE:O	2:C:1835:HIS:ND1	2.53	0.41
2:C:2119:LEU:HB2	2:C:2152:ASN:ND2	2.36	0.41
2:C:2250:ASN:HB3	2:C:2253:LEU:HB2	2.01	0.41
2:C:2538:THR:O	2:C:2584:MET:HE1	2.21	0.41
2:C:2793:ARG:HG3	2:C:2794:GLU:N	2.35	0.41
2:C:3050:LEU:HD23	2:C:3051:GLU:N	2.36	0.41
2:C:4748:MET:N	2:C:4748:MET:SD	2.93	0.41
3:J:98:ASN:OD1	3:J:99:GLY:N	2.53	0.41
2:A:139:SER:O	2:A:141:ASP:N	2.51	0.41
2:A:260:VAL:HG23	2:A:391:ALA:HB3	2.03	0.41
2:A:643:LEU:O	2:A:645:GLN:NE2	2.54	0.41
2:A:2607:LEU:HD22	2:A:2664:LEU:HG	2.01	0.41
2:A:2771:TYR:C	2:A:2774:PRO:HD2	2.46	0.41
2:A:2773:TRP:CE3	2:A:2773:TRP:HA	2.55	0.41
2:A:3050:LEU:HD23	2:A:3051:GLU:N	2.36	0.41
2:A:3250:TRP:CD1	2:A:3309:LYS:HG2	2.56	0.41
2:A:3667:LEU:HD21	2:A:3691:TYR:CD2	2.55	0.41
2:D:675:TYR:HB3	2:D:822:CYS:SG	2.60	0.41
2:D:2771:TYR:C	2:D:2774:PRO:HD2	2.46	0.41
2:D:3661:VAL:HB	2:D:3665:HIS:HB3	2.02	0.41
2:D:4622:SER:OG	2:D:4624:ASP:OD1	2.23	0.41
2:D:4654:MET:HE3	2:D:4654:MET:O	2.21	0.41
2:B:2773:TRP:HA	2:B:2773:TRP:CE3	2.55	0.41
2:B:2928:GLN:O	2:B:2931:ARG:HG2	2.21	0.41
2:B:3054:LYS:HB3	2:B:3058:ARG:HH12	1.86	0.41
2:B:4173:ILE:HD13	2:B:4884:MET:HE2	2.02	0.41
2:B:4522:VAL:HG12	2:C:4807:ASP:O	2.20	0.41
2:B:4782:THR:HG22	2:B:4809:MET:HE1	2.02	0.41
2:B:4930:GLU:HA	2:B:4933:HIS:ND1	2.35	0.41
2:C:897:LYS:HD2	2:C:902:TRP:CD1	2.56	0.41
2:C:1312:GLU:OE1	2:C:1536:SER:OG	2.30	0.41
2:C:1944:TYR:CE1	2:C:1948:MET:HE3	2.55	0.41
2:C:2057:THR:HB	2:C:2060:GLN:HG3	2.01	0.41
2:C:2867:ASN:ND2	2:C:2867:ASN:C	2.78	0.41
2:C:3054:LYS:HB3	2:C:3058:ARG:HH12	1.86	0.41
2:C:3729:ALA:O	2:C:3733:ASP:HB2	2.20	0.41
3:K:98:ASN:OD1	3:K:99:GLY:N	2.53	0.41
2:A:593:HIS:O	2:A:597:ILE:HG13	2.21	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:675:TYR:HB3	2:A:822:CYS:SG	2.60	0.41
2:A:718:VAL:HG23	2:A:793:SER:HB3	2.01	0.41
2:A:2279:MET:HE3	2:A:2279:MET:HB3	1.78	0.41
2:A:2847:ASN:HA	2:A:2850:ASN:HB2	2.03	0.41
2:A:3239:LEU:HD22	2:A:3280:ILE:HG12	2.01	0.41
2:A:3830:LEU:HD12	2:A:3830:LEU:HA	1.88	0.41
2:D:23:GLN:HG2	2:D:36:CYS:SG	2.60	0.41
2:D:420:ARG:HA	2:D:423:VAL:HG12	2.02	0.41
2:D:602:ASP:HA	2:D:642:LEU:HD21	2.02	0.41
2:D:1016:TRP:CE3	2:D:1029:ASN:HB2	2.56	0.41
2:D:3026:ALA:HA	2:D:3029:ILE:HD13	2.03	0.41
2:D:3234:VAL:HA	2:D:3238:ILE:HG12	2.02	0.41
2:B:465:PRO:HA	2:B:466:PRO:HD3	1.98	0.41
2:B:1088:PHE:HB2	2:B:1205:CYS:SG	2.60	0.41
2:B:1242:ASN:ND2	2:B:1805:HIS:O	2.54	0.41
2:B:2983:LEU:HD13	2:B:2983:LEU:HA	1.81	0.41
2:B:3050:LEU:HD23	2:B:3051:GLU:N	2.36	0.41
2:B:3250:TRP:CD1	2:B:3309:LYS:HG2	2.56	0.41
2:C:23:GLN:HG2	2:C:36:CYS:SG	2.60	0.41
2:C:2085:PHE:HB3	2:C:3691:TYR:CE2	2.53	0.41
2:C:2724:TYR:OH	2:C:2891:ASP:OD2	2.36	0.41
2:C:4896:ASP:OD1	2:C:4897:TYR:N	2.54	0.41
2:A:349:MET:HA	2:A:349:MET:HE3	2.03	0.41
2:A:677:LEU:HD12	2:A:801:ARG:O	2.20	0.41
2:A:997:ASP:HA	2:A:1047:LYS:NZ	2.34	0.41
2:A:1724:GLU:OE2	2:A:2127:ARG:NH2	2.40	0.41
2:A:2497:ARG:HD2	2:A:2872:VAL:HG21	2.02	0.41
2:A:3016:ARG:HH12	2:A:3064:ALA:HA	1.85	0.41
2:A:3045:VAL:O	2:A:3054:LYS:NZ	2.46	0.41
1:F:63:GLY:HA3	1:F:75:LEU:HD21	2.03	0.41
2:D:593:HIS:O	2:D:597:ILE:HG13	2.21	0.41
2:D:878:LEU:HD23	2:D:940:LEU:HD23	2.03	0.41
2:D:997:ASP:HA	2:D:1047:LYS:HZ1	1.85	0.41
2:D:1304:LEU:HD12	2:D:1541:PRO:HB2	2.01	0.41
2:D:2348:GLU:O	2:D:2351:ILE:HG22	2.21	0.41
2:D:2497:ARG:HD2	2:D:2872:VAL:HG21	2.02	0.41
2:D:2724:TYR:OH	2:D:2891:ASP:OD2	2.36	0.41
2:D:2928:GLN:O	2:D:2931:ARG:HG2	2.21	0.41
2:D:3250:TRP:CD1	2:D:3309:LYS:HG2	2.56	0.41
2:D:4732:GLY:HA2	2:D:4735:ASN:O	2.21	0.41
2:B:420:ARG:HA	2:B:423:VAL:HG12	2.02	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:2348:GLU:O	2:B:2351:ILE:HG22	2.21	0.41
2:B:3069:GLU:O	2:B:3072:MET:HB2	2.21	0.41
2:B:3285:TYR:O	2:B:3325:LYS:NZ	2.53	0.41
2:C:349:MET:HE3	2:C:349:MET:HA	2.03	0.41
2:C:878:LEU:HD23	2:C:940:LEU:HD23	2.03	0.41
2:C:2928:GLN:O	2:C:2931:ARG:HG2	2.21	0.41
2:C:3069:GLU:O	2:C:3072:MET:HB2	2.21	0.41
2:C:3250:TRP:CD1	2:C:3309:LYS:HG2	2.56	0.41
3:K:13:PHE:CE1	3:K:73:MET:HE1	2.56	0.41
1:H:63:GLY:HA3	1:H:75:LEU:HD21	2.03	0.41
2:A:12:GLN:C	2:A:13:PHE:HD2	2.29	0.41
2:A:1444:GLY:HA3	2:A:1487:MET:HA	2.03	0.41
2:A:1944:TYR:CE1	2:A:1948:MET:HE3	2.55	0.41
2:A:2150:MET:HE1	2:A:2199:PHE:HA	2.01	0.41
2:A:2248:MET:HE3	2:A:2248:MET:HB2	1.90	0.41
2:A:2348:GLU:O	2:A:2351:ILE:HG22	2.21	0.41
2:A:2507:LEU:HA	2:A:2510:THR:HG23	2.03	0.41
2:A:2538:THR:O	2:A:2584:MET:HE1	2.21	0.41
2:A:2836:ASP:O	2:A:2840:MET:HG2	2.21	0.41
2:A:3069:GLU:O	2:A:3072:MET:HB2	2.21	0.41
2:A:3605:MET:HE3	2:A:3606:ALA:N	2.36	0.41
2:A:3840:PHE:CE1	2:A:3874:THR:HG23	2.56	0.41
2:A:4255:LEU:O	2:A:4258:MET:HG3	2.21	0.41
2:A:4654:MET:O	2:A:4654:MET:HE3	2.21	0.41
2:A:4693:SER:O	2:A:4697:VAL:HG23	2.21	0.41
2:A:4732:GLY:HA2	2:A:4735:ASN:O	2.21	0.41
2:A:4757:LEU:HD23	2:A:4757:LEU:HA	1.90	0.41
2:D:897:LYS:HD2	2:D:902:TRP:CD1	2.56	0.41
2:D:969:ASN:OD1	2:D:970:TYR:N	2.50	0.41
2:D:972:LEU:HD21	2:D:976:TYR:HB3	2.03	0.41
2:D:1170:GLU:OE1	2:D:1170:GLU:N	2.54	0.41
2:D:1502:ASN:OD1	2:D:1503:ASN:N	2.48	0.41
2:D:1825:PHE:CE1	2:D:1842:ILE:HG12	2.55	0.41
2:D:2279:MET:HE3	2:D:2279:MET:HB3	1.78	0.41
2:D:2538:THR:O	2:D:2584:MET:HE1	2.21	0.41
2:D:2735:ASP:OD1	2:D:2736:LYS:N	2.53	0.41
2:D:2836:ASP:O	2:D:2840:MET:HG2	2.21	0.41
2:D:2980:LEU:HA	2:D:2983:LEU:HB2	2.03	0.41
2:D:3025:ASP:O	2:D:3028:SER:OG	2.20	0.41
2:D:3046:MET:HE3	2:D:3121:LEU:HD12	2.03	0.41
2:D:3605:MET:HE3	2:D:3606:ALA:N	2.36	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:4033:LYS:HA	2:D:4033:LYS:HD2	1.76	0.41
2:D:4084:VAL:O	2:D:4088:HIS:HB3	2.21	0.41
2:D:4173:ILE:HD13	2:D:4884:MET:HE2	2.02	0.41
2:D:4512:ALA:O	2:D:4516:ILE:HG13	2.21	0.41
2:D:4693:SER:O	2:D:4697:VAL:HG23	2.21	0.41
2:B:194:LEU:HD11	2:B:201:LEU:HD23	2.02	0.41
2:B:966:LEU:H	2:B:977:LYS:HZ3	1.67	0.41
2:B:997:ASP:HA	2:B:1047:LYS:HZ1	1.86	0.41
2:B:997:ASP:HA	2:B:1047:LYS:NZ	2.34	0.41
2:B:1697:LEU:HD23	2:B:1697:LEU:HA	1.87	0.41
2:B:1833:ILE:O	2:B:1835:HIS:ND1	2.53	0.41
2:B:2119:LEU:HB2	2:B:2152:ASN:ND2	2.36	0.41
2:B:2407:HIS:CE1	2:B:2408:LEU:HG	2.56	0.41
2:B:2507:LEU:HA	2:B:2510:THR:HG23	2.03	0.41
2:B:2847:ASN:HA	2:B:2850:ASN:HB2	2.03	0.41
2:B:3729:ALA:O	2:B:3733:ASP:HB2	2.20	0.41
2:B:4268:MET:O	2:B:4272:LYS:HG2	2.21	0.41
2:B:4654:MET:O	2:B:4654:MET:HE3	2.21	0.41
2:B:4848:ILE:HD13	2:B:4848:ILE:HA	1.92	0.41
2:C:128:MET:HB3	2:C:149:LEU:HB3	2.03	0.41
2:C:233:VAL:HG12	2:C:274:LEU:HD22	2.03	0.41
2:C:695:VAL:O	2:C:727:PHE:N	2.52	0.41
2:C:956:HIS:O	2:C:960:LYS:HG3	2.20	0.41
2:C:1128:LEU:HD23	2:C:1128:LEU:HA	1.95	0.41
2:C:1242:ASN:ND2	2:C:1805:HIS:O	2.54	0.41
2:C:1444:GLY:HA3	2:C:1487:MET:HA	2.03	0.41
2:C:1896:MET:HE2	2:C:1896:MET:HB3	1.89	0.41
2:C:2054:LYS:NZ	2:C:2056:SER:OG	2.34	0.41
2:C:2497:ARG:HD2	2:C:2872:VAL:HG21	2.02	0.41
2:C:2638:LEU:HD23	2:C:2638:LEU:HA	1.86	0.41
2:C:2693:SER:O	2:C:2702:ASN:ND2	2.54	0.41
2:C:3016:ARG:HH12	2:C:3064:ALA:HA	1.85	0.41
2:C:3046:MET:HE3	2:C:3121:LEU:HD12	2.03	0.41
2:C:3234:VAL:HA	2:C:3238:ILE:HG12	2.02	0.41
2:C:3605:MET:HE3	2:C:3606:ALA:N	2.36	0.41
2:C:4196:THR:O	2:C:4200:MET:HG3	2.21	0.41
2:C:4237:SER:HB3	2:C:4240:THR:HG23	2.02	0.41
2:C:4654:MET:O	2:C:4654:MET:HE3	2.21	0.41
2:C:4693:SER:O	2:C:4697:VAL:HG23	2.21	0.41
2:C:4930:GLU:HA	2:C:4933:HIS:ND1	2.35	0.41
2:A:956:HIS:O	2:A:960:LYS:HG3	2.20	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:2987:SER:O	2:A:2988:ARG:HB2	2.21	0.41
2:A:3027:THR:HA	2:A:3030:VAL:HG12	2.03	0.41
2:A:4196:THR:O	2:A:4200:MET:HG3	2.21	0.41
1:G:3:VAL:HG22	1:G:77:CYS:HA	2.02	0.41
3:I:38:ARG:CZ	3:I:38:ARG:HA	2.51	0.41
2:D:762:SER:OG	2:D:763:ALA:N	2.54	0.41
2:D:2607:LEU:HD22	2:D:2664:LEU:HG	2.01	0.41
2:D:3239:LEU:HA	2:D:3239:LEU:HD23	1.85	0.41
2:B:364:GLN:HE21	2:B:369:GLY:C	2.27	0.41
2:B:505:LEU:HG	2:B:526:TRP:NE1	2.36	0.41
2:B:989:THR:HG22	2:B:991:SER:H	1.85	0.41
2:B:1016:TRP:CE3	2:B:1029:ASN:HB2	2.56	0.41
2:B:2123:LEU:CD1	2:B:2167:MET:HG2	2.47	0.41
2:B:2279:MET:HE3	2:B:2279:MET:HB3	1.79	0.41
2:B:2771:TYR:C	2:B:2774:PRO:HD2	2.46	0.41
2:B:3239:LEU:HD22	2:B:3280:ILE:HG12	2.01	0.41
2:B:4634:VAL:HG22	2:B:4640:PHE:CD1	2.55	0.41
2:C:12:GLN:C	2:C:13:PHE:HD2	2.29	0.41
2:C:260:VAL:HG23	2:C:391:ALA:HB3	2.03	0.41
2:C:630:HIS:CE1	2:C:1671:ARG:HE	2.40	0.41
2:C:2674:GLY:HA3	2:C:2977:ASN:HD22	1.86	0.41
2:C:2836:ASP:O	2:C:2840:MET:HG2	2.21	0.41
2:C:2847:ASN:HA	2:C:2850:ASN:HB2	2.03	0.41
2:C:2980:LEU:HA	2:C:2983:LEU:HB2	2.03	0.41
2:C:2987:SER:O	2:C:2988:ARG:HB2	2.21	0.41
2:C:3127:GLN:HG3	2:C:3183:ILE:HB	2.02	0.41
2:C:4084:VAL:O	2:C:4088:HIS:HB3	2.21	0.41
2:C:4268:MET:O	2:C:4272:LYS:HG2	2.21	0.41
2:C:4512:ALA:O	2:C:4516:ILE:HG13	2.21	0.41
2:C:4634:VAL:HG22	2:C:4640:PHE:CD1	2.55	0.41
2:A:878:LEU:HD23	2:A:940:LEU:HD23	2.03	0.40
2:A:1290:PHE:HE2	2:D:2832:THR:OG1	2.03	0.40
2:A:4026:LEU:HD13	2:A:4055:HIS:CD2	2.56	0.40
2:A:4200:MET:CE	2:A:4923:MET:HE1	2.52	0.40
2:A:4268:MET:O	2:A:4272:LYS:HG2	2.21	0.40
2:D:331:PHE:HE1	2:D:363:ILE:HG13	1.86	0.40
2:D:467:ASP:O	2:D:475:LYS:NZ	2.37	0.40
2:D:505:LEU:HG	2:D:526:TRP:NE1	2.37	0.40
2:D:630:HIS:CE1	2:D:1671:ARG:HE	2.40	0.40
2:D:1760:ARG:HE	2:D:1760:ARG:HB3	1.71	0.40
2:D:2119:LEU:HB2	2:D:2152:ASN:ND2	2.36	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:2200:LEU:HD23	2:D:2200:LEU:HA	1.96	0.40
2:D:3109:PHE:CE1	2:D:3162:PHE:HD1	2.40	0.40
2:D:3840:PHE:CE1	2:D:3874:THR:HG23	2.56	0.40
2:B:233:VAL:HG12	2:B:274:LEU:HD22	2.03	0.40
2:B:260:VAL:HG23	2:B:391:ALA:HB3	2.03	0.40
2:B:3026:ALA:HA	2:B:3029:ILE:HD13	2.03	0.40
2:B:4026:LEU:HD13	2:B:4055:HIS:CD2	2.56	0.40
2:C:168:GLN:HG2	2:C:169:ARG:HG2	2.03	0.40
2:C:2488:LEU:HD21	2:C:2548:LEU:HD22	2.03	0.40
2:C:2771:TYR:C	2:C:2774:PRO:HD2	2.46	0.40
2:C:2789:ILE:HD11	2:C:2901:TYR:HB3	2.02	0.40
2:C:3029:ILE:O	2:C:3033:LEU:HD23	2.20	0.40
2:C:4173:ILE:HD13	2:C:4884:MET:HE2	2.02	0.40
2:C:4200:MET:CE	2:C:4923:MET:HE1	2.52	0.40
2:C:4732:GLY:HA2	2:C:4735:ASN:O	2.21	0.40
3:K:38:ARG:CZ	3:K:38:ARG:HA	2.51	0.40
2:A:26:ALA:O	2:A:33:GLN:N	2.51	0.40
2:A:420:ARG:HA	2:A:423:VAL:HG12	2.02	0.40
2:A:505:LEU:HG	2:A:526:TRP:NE1	2.36	0.40
2:A:630:HIS:CE1	2:A:1671:ARG:HE	2.40	0.40
2:A:879:GLU:HA	2:A:882:ARG:HB2	2.04	0.40
2:A:1242:ASN:ND2	2:A:1805:HIS:O	2.54	0.40
2:A:2264:LYS:HE2	2:A:2264:LYS:HB2	1.79	0.40
2:A:2407:HIS:CE1	2:A:2408:LEU:HG	2.56	0.40
2:A:2847:ASN:O	2:A:2847:ASN:ND2	2.51	0.40
2:A:4044:SER:HB3	2:A:4047:ASP:OD2	2.21	0.40
1:F:74:LYS:HB3	1:F:74:LYS:HE2	1.93	0.40
3:I:98:ASN:OD1	3:I:99:GLY:N	2.53	0.40
3:I:107:ARG:O	3:I:110:MET:SD	2.80	0.40
2:D:168:GLN:HG2	2:D:169:ARG:HG2	2.03	0.40
2:D:2507:LEU:HA	2:D:2510:THR:HG23	2.03	0.40
2:D:3016:ARG:HH12	2:D:3064:ALA:HA	1.85	0.40
2:B:593:HIS:O	2:B:597:ILE:HG13	2.21	0.40
2:B:878:LEU:HD23	2:B:940:LEU:HD23	2.03	0.40
2:B:1168:MET:HE3	2:B:1168:MET:HB3	1.93	0.40
2:B:2925:PHE:HZ	2:B:2970:LEU:HD13	1.86	0.40
2:B:2980:LEU:HA	2:B:2983:LEU:HB2	2.03	0.40
2:B:3311:LYS:NZ	2:B:3313:GLN:HB2	2.33	0.40
2:C:505:LEU:HG	2:C:526:TRP:NE1	2.36	0.40
2:C:762:SER:OG	2:C:763:ALA:N	2.54	0.40
2:C:3027:THR:HA	2:C:3030:VAL:HG12	2.03	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:J:38:ARG:HA	3:J:38:ARG:CZ	2.51	0.40
3:J:107:ARG:O	3:J:110:MET:SD	2.80	0.40
1:H:3:VAL:HG22	1:H:77:CYS:HA	2.02	0.40
2:A:762:SER:OG	2:A:763:ALA:N	2.54	0.40
2:A:3054:LYS:HB3	2:A:3058:ARG:HH12	1.86	0.40
2:D:233:VAL:HG12	2:D:274:LEU:HD22	2.03	0.40
2:D:423:VAL:HG23	2:D:497:LEU:HD22	2.04	0.40
2:D:677:LEU:HD12	2:D:801:ARG:O	2.20	0.40
2:D:2925:PHE:HZ	2:D:2970:LEU:HD13	1.86	0.40
2:D:2987:SER:O	2:D:2988:ARG:HB2	2.21	0.40
2:D:3037:GLY:HA2	2:D:3040:LEU:HG	2.03	0.40
2:D:3924:ILE:HG22	2:D:3931:ASN:HB3	2.04	0.40
2:D:4814:MET:HE3	2:D:4814:MET:HB2	1.95	0.40
2:B:897:LYS:HD2	2:B:902:TRP:CD1	2.56	0.40
2:B:1170:GLU:N	2:B:1170:GLU:OE1	2.54	0.40
2:B:3109:PHE:CE1	2:B:3162:PHE:HD1	2.40	0.40
2:B:3840:PHE:CE1	2:B:3874:THR:HG23	2.56	0.40
2:C:194:LEU:HD11	2:C:201:LEU:HD23	2.02	0.40
2:C:1497:GLY:C	2:C:1498:GLN:HG3	2.47	0.40
2:C:2925:PHE:HZ	2:C:2970:LEU:HD13	1.86	0.40
2:C:4242:ARG:HA	2:C:4242:ARG:HD2	1.88	0.40
3:L:38:ARG:CZ	3:L:38:ARG:HA	2.51	0.40
2:A:1438:PRO:HB2	2:A:1491:GLY:HA2	2.03	0.40
2:A:2119:LEU:HB2	2:A:2152:ASN:ND2	2.36	0.40
2:A:2980:LEU:HA	2:A:2983:LEU:HB2	2.03	0.40
2:A:4242:ARG:HD2	2:A:4242:ARG:HA	1.88	0.40
3:I:121:GLU:O	3:I:124:GLU:HB2	2.21	0.40
2:D:12:GLN:C	2:D:13:PHE:HD2	2.29	0.40
2:D:114:LEU:HB2	2:D:117:HIS:HD2	1.84	0.40
2:D:1017:THR:HB	2:D:1028:ARG:HG2	2.02	0.40
2:D:1895:GLN:HE22	2:D:2068:ARG:HH22	1.69	0.40
2:D:4255:LEU:O	2:D:4258:MET:HG3	2.21	0.40
2:B:331:PHE:HE1	2:B:363:ILE:HG13	1.86	0.40
2:B:602:ASP:HA	2:B:642:LEU:HD21	2.02	0.40
2:B:1680:VAL:HG12	2:B:1685:LEU:HG	2.04	0.40
2:B:1823:LYS:HB3	2:B:1823:LYS:HE3	1.97	0.40
2:B:1944:TYR:CE1	2:B:1948:MET:HE3	2.55	0.40
2:B:1962:THR:HG23	2:B:1966:ARG:NE	2.30	0.40
2:B:2943:PHE:HE2	2:B:2954:PHE:HB3	1.87	0.40
2:B:2987:SER:O	2:B:2988:ARG:HB2	2.21	0.40
2:B:3114:GLN:HG2	2:B:3115:HIS:N	2.37	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:3744:ILE:O	2:B:3747:SER:OG	2.30	0.40
2:B:4255:LEU:O	2:B:4258:MET:HG3	2.21	0.40
2:C:331:PHE:HE1	2:C:363:ILE:HG13	1.86	0.40
2:C:1017:THR:HB	2:C:1028:ARG:HG2	2.02	0.40
2:C:2070:ALA:HA	2:C:2075:ILE:HD11	2.04	0.40
2:C:2507:LEU:HA	2:C:2510:THR:HG23	2.03	0.40
2:C:2849:HIS:HB2	2:C:2885:ASP:OD2	2.22	0.40
2:C:3236:GLU:CD	2:C:3298:ARG:HH21	2.29	0.40
3:K:121:GLU:O	3:K:124:GLU:HB2	2.22	0.40
2:A:128:MET:HB3	2:A:149:LEU:HB3	2.03	0.40
2:A:364:GLN:HE21	2:A:369:GLY:C	2.28	0.40
2:A:897:LYS:HD2	2:A:902:TRP:CD1	2.56	0.40
2:A:972:LEU:HD21	2:A:976:TYR:HB3	2.03	0.40
2:A:3026:ALA:HA	2:A:3029:ILE:HD13	2.03	0.40
2:A:3236:GLU:CD	2:A:3298:ARG:HH21	2.29	0.40
3:I:13:PHE:CE1	3:I:73:MET:HE1	2.56	0.40
2:D:879:GLU:HA	2:D:882:ARG:HB2	2.03	0.40
2:D:1497:GLY:C	2:D:1498:GLN:HG3	2.47	0.40
2:D:2232:PRO:HB2	2:D:2379:ASP:HA	2.03	0.40
2:D:2824:ARG:NH1	2:D:2826:ILE:HD11	2.37	0.40
2:D:3027:THR:HA	2:D:3030:VAL:HG12	2.04	0.40
2:D:4237:SER:HB3	2:D:4240:THR:HG23	2.02	0.40
2:B:128:MET:HB3	2:B:149:LEU:HB3	2.03	0.40
2:B:2312:SER:OG	2:B:2474:ARG:NH2	2.55	0.40
2:B:2999:LYS:HG3	2:B:3003:MET:CE	2.52	0.40
2:B:3037:GLY:HA2	2:B:3040:LEU:HG	2.03	0.40
2:B:4044:SER:HB3	2:B:4047:ASP:OD2	2.21	0.40
2:C:364:GLN:HE21	2:C:369:GLY:C	2.28	0.40
2:C:420:ARG:HA	2:C:423:VAL:HG12	2.03	0.40
2:C:765:SER:HA	2:C:779:PHE:O	2.22	0.40
2:C:989:THR:HG22	2:C:991:SER:H	1.85	0.40
2:C:1100:ARG:HB3	2:C:1236:TYR:CD1	2.57	0.40
2:C:2407:HIS:CE1	2:C:2408:LEU:HG	2.56	0.40
2:C:3043:ARG:HH12	2:C:3116:GLN:C	2.27	0.40
2:C:3109:PHE:CE1	2:C:3162:PHE:HD1	2.40	0.40
3:J:13:PHE:CE1	3:J:73:MET:HE1	2.56	0.40
3:L:107:ARG:O	3:L:110:MET:SD	2.80	0.40

There are no symmetry-related clashes.

5.3 Torsion angles

5.3.1 Protein backbone

In the following table, the Percentiles column shows the percent Ramachandran outliers of the chain as a percentile score with respect to all PDB entries followed by that with respect to all EM entries.

The Analysed column shows the number of residues for which the backbone conformation was analysed, and the total number of residues.

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
1	E	105/108 (97%)	101 (96%)	4 (4%)	0	100	100
1	F	105/108 (97%)	101 (96%)	4 (4%)	0	100	100
1	G	105/108 (97%)	101 (96%)	4 (4%)	0	100	100
1	H	105/108 (97%)	101 (96%)	4 (4%)	0	100	100
2	A	4203/4967 (85%)	4057 (96%)	144 (3%)	2 (0%)	100	100
2	B	4203/4967 (85%)	4057 (96%)	144 (3%)	2 (0%)	100	100
2	C	4203/4967 (85%)	4057 (96%)	144 (3%)	2 (0%)	100	100
2	D	4203/4967 (85%)	4057 (96%)	144 (3%)	2 (0%)	100	100
3	I	136/149 (91%)	126 (93%)	9 (7%)	1 (1%)	18	37
3	J	136/149 (91%)	126 (93%)	9 (7%)	1 (1%)	18	37
3	K	136/149 (91%)	126 (93%)	9 (7%)	1 (1%)	18	37
3	L	136/149 (91%)	126 (93%)	9 (7%)	1 (1%)	18	37
All	All	17776/20896 (85%)	17136 (96%)	628 (4%)	12 (0%)	49	71

All (12) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
2	A	2988	ARG
2	A	4641	PRO
2	D	2988	ARG
2	D	4641	PRO
2	B	2988	ARG
2	B	4641	PRO
2	C	2988	ARG
2	C	4641	PRO
3	I	21	ASP
3	J	21	ASP
3	K	21	ASP
3	L	21	ASP

5.3.2 Protein sidechains ⓘ

In the following table, the Percentiles column shows the percent sidechain outliers of the chain as a percentile score with respect to all PDB entries followed by that with respect to all EM entries.

The Analysed column shows the number of residues for which the sidechain conformation was analysed, and the total number of residues.

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	E	88/89 (99%)	82 (93%)	6 (7%)	14	32
1	F	88/89 (99%)	82 (93%)	6 (7%)	14	32
1	G	88/89 (99%)	82 (93%)	6 (7%)	14	32
1	H	88/89 (99%)	82 (93%)	6 (7%)	14	32
2	A	3712/4358 (85%)	3651 (98%)	61 (2%)	55	78
2	B	3712/4358 (85%)	3651 (98%)	61 (2%)	55	78
2	C	3712/4358 (85%)	3651 (98%)	61 (2%)	55	78
2	D	3712/4358 (85%)	3651 (98%)	61 (2%)	55	78
3	I	119/127 (94%)	112 (94%)	7 (6%)	18	38
3	J	119/127 (94%)	112 (94%)	7 (6%)	18	38
3	K	119/127 (94%)	112 (94%)	7 (6%)	18	38
3	L	119/127 (94%)	112 (94%)	7 (6%)	18	38
All	All	15676/18296 (86%)	15380 (98%)	296 (2%)	49	75

All (296) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	H	6	GLU
1	H	19	LYS
1	H	30	MET
1	H	50	ARG
1	H	53	LYS
1	H	58	LYS
2	A	81	MET
2	A	520	ARG
2	A	778	MET
2	A	829	LYS
2	A	946	LEU
2	A	1064	LEU
2	A	2172	MET
2	A	2192	MET

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Mol	Chain	Res	Type
2	A	2214	MET
2	A	2275	GLN
2	A	2279	MET
2	A	2384	MET
2	A	2456	MET
2	A	2585	MET
2	A	2590	ARG
2	A	2607	LEU
2	A	2659	GLN
2	A	2688	MET
2	A	2695	MET
2	A	2700	ASN
2	A	2702	ASN
2	A	2704	GLN
2	A	2760	TYR
2	A	2772	ARG
2	A	2782	MET
2	A	2838[A]	HIS
2	A	2838[B]	HIS
2	A	2844	MET
2	A	2867	ASN
2	A	2880	LYS
2	A	2884	LYS
2	A	2887	GLU
2	A	2896	LEU
2	A	2938	GLN
2	A	2941	LEU
2	A	2980	LEU
2	A	2983	LEU
2	A	2995	HIS
2	A	3068	LEU
2	A	3114	GLN
2	A	3123	LEU
2	A	3178	HIS
2	A	3181	TYR
2	A	3215	MET
2	A	3218	ILE
2	A	3242	LEU
2	A	3263	MET
2	A	3273	MET
2	A	3296	MET
2	A	3299	LEU

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Mol	Chain	Res	Type
2	A	3605	MET
2	A	3954	MET
2	A	4046	ARG
2	A	4183	LYS
2	A	4200	MET
2	A	4258	MET
2	A	4267	GLN
2	A	4268	MET
2	A	4726	MET
2	A	4809	MET
2	A	4814	MET
1	E	6	GLU
1	E	19	LYS
1	E	30	MET
1	E	50	ARG
1	E	53	LYS
1	E	58	LYS
1	F	6	GLU
1	F	19	LYS
1	F	30	MET
1	F	50	ARG
1	F	53	LYS
1	F	58	LYS
1	G	6	GLU
1	G	19	LYS
1	G	30	MET
1	G	50	ARG
1	G	53	LYS
1	G	58	LYS
3	I	1	MET
3	I	53	ILE
3	I	77	MET
3	I	78	LYS
3	I	110	MET
3	I	125	MET
3	I	136	GLN
2	D	81	MET
2	D	520	ARG
2	D	778	MET
2	D	829	LYS
2	D	946	LEU
2	D	1064	LEU

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Mol	Chain	Res	Type
2	D	2172	MET
2	D	2192	MET
2	D	2214	MET
2	D	2275	GLN
2	D	2279	MET
2	D	2384	MET
2	D	2456	MET
2	D	2585	MET
2	D	2590	ARG
2	D	2607	LEU
2	D	2659	GLN
2	D	2688	MET
2	D	2695	MET
2	D	2700	ASN
2	D	2702	ASN
2	D	2704	GLN
2	D	2760	TYR
2	D	2772	ARG
2	D	2782	MET
2	D	2838[A]	HIS
2	D	2838[B]	HIS
2	D	2844	MET
2	D	2867	ASN
2	D	2880	LYS
2	D	2884	LYS
2	D	2887	GLU
2	D	2896	LEU
2	D	2938	GLN
2	D	2941	LEU
2	D	2980	LEU
2	D	2983	LEU
2	D	2995	HIS
2	D	3068	LEU
2	D	3114	GLN
2	D	3123	LEU
2	D	3178	HIS
2	D	3181	TYR
2	D	3215	MET
2	D	3218	ILE
2	D	3242	LEU
2	D	3263	MET
2	D	3273	MET

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Mol	Chain	Res	Type
2	D	3296	MET
2	D	3299	LEU
2	D	3605	MET
2	D	3954	MET
2	D	4046	ARG
2	D	4183	LYS
2	D	4200	MET
2	D	4258	MET
2	D	4267	GLN
2	D	4268	MET
2	D	4726	MET
2	D	4809	MET
2	D	4814	MET
2	B	81	MET
2	B	520	ARG
2	B	778	MET
2	B	829	LYS
2	B	946	LEU
2	B	1064	LEU
2	B	2172	MET
2	B	2192	MET
2	B	2214	MET
2	B	2275	GLN
2	B	2279	MET
2	B	2384	MET
2	B	2456	MET
2	B	2585	MET
2	B	2590	ARG
2	B	2607	LEU
2	B	2659	GLN
2	B	2688	MET
2	B	2695	MET
2	B	2700	ASN
2	B	2702	ASN
2	B	2704	GLN
2	B	2760	TYR
2	B	2772	ARG
2	B	2782	MET
2	B	2838[A]	HIS
2	B	2838[B]	HIS
2	B	2844	MET
2	B	2867	ASN

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Mol	Chain	Res	Type
2	B	2880	LYS
2	B	2884	LYS
2	B	2887	GLU
2	B	2896	LEU
2	B	2938	GLN
2	B	2941	LEU
2	B	2980	LEU
2	B	2983	LEU
2	B	2995	HIS
2	B	3068	LEU
2	B	3114	GLN
2	B	3123	LEU
2	B	3178	HIS
2	B	3181	TYR
2	B	3215	MET
2	B	3218	ILE
2	B	3242	LEU
2	B	3263	MET
2	B	3273	MET
2	B	3296	MET
2	B	3299	LEU
2	B	3605	MET
2	B	3954	MET
2	B	4046	ARG
2	B	4183	LYS
2	B	4200	MET
2	B	4258	MET
2	B	4267	GLN
2	B	4268	MET
2	B	4726	MET
2	B	4809	MET
2	B	4814	MET
2	C	81	MET
2	C	520	ARG
2	C	778	MET
2	C	829	LYS
2	C	946	LEU
2	C	1064	LEU
2	C	2172	MET
2	C	2192	MET
2	C	2214	MET
2	C	2275	GLN

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Mol	Chain	Res	Type
2	C	2279	MET
2	C	2384	MET
2	C	2456	MET
2	C	2585	MET
2	C	2590	ARG
2	C	2607	LEU
2	C	2659	GLN
2	C	2688	MET
2	C	2695	MET
2	C	2700	ASN
2	C	2702	ASN
2	C	2704	GLN
2	C	2760	TYR
2	C	2772	ARG
2	C	2782	MET
2	C	2838[A]	HIS
2	C	2838[B]	HIS
2	C	2844	MET
2	C	2867	ASN
2	C	2880	LYS
2	C	2884	LYS
2	C	2887	GLU
2	C	2896	LEU
2	C	2938	GLN
2	C	2941	LEU
2	C	2980	LEU
2	C	2983	LEU
2	C	2995	HIS
2	C	3068	LEU
2	C	3114	GLN
2	C	3123	LEU
2	C	3178	HIS
2	C	3181	TYR
2	C	3215	MET
2	C	3218	ILE
2	C	3242	LEU
2	C	3263	MET
2	C	3273	MET
2	C	3296	MET
2	C	3299	LEU
2	C	3605	MET
2	C	3954	MET

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Mol	Chain	Res	Type
2	C	4046	ARG
2	C	4183	LYS
2	C	4200	MET
2	C	4258	MET
2	C	4267	GLN
2	C	4268	MET
2	C	4726	MET
2	C	4809	MET
2	C	4814	MET
3	J	1	MET
3	J	53	ILE
3	J	77	MET
3	J	78	LYS
3	J	110	MET
3	J	125	MET
3	J	136	GLN
3	K	1	MET
3	K	53	ILE
3	K	77	MET
3	K	78	LYS
3	K	110	MET
3	K	125	MET
3	K	136	GLN
3	L	1	MET
3	L	53	ILE
3	L	77	MET
3	L	78	LYS
3	L	110	MET
3	L	125	MET
3	L	136	GLN

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (169) such sidechains are listed below:

Mol	Chain	Res	Type
1	H	95	ASN
2	A	604	HIS
2	A	651	HIS
2	A	692	HIS
2	A	903	GLN
2	A	932	ASN
2	A	1005	ASN
2	A	1069	GLN

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Mol	Chain	Res	Type
2	A	1233	GLN
2	A	1244	ASN
2	A	1562	ASN
2	A	1577	ASN
2	A	1905	GLN
2	A	1974	ASN
2	A	2160	ASN
2	A	2540	HIS
2	A	2550	HIS
2	A	2565	GLN
2	A	2639	HIS
2	A	2700	ASN
2	A	2849	HIS
2	A	2937	HIS
2	A	2973	GLN
2	A	3031	ASN
2	A	3114	GLN
2	A	3115	HIS
2	A	3151	GLN
2	A	3230	GLN
2	A	3318	HIS
2	A	3770	ASN
2	A	3775	GLN
2	A	3831	GLN
2	A	3869	ASN
2	A	3915	GLN
2	A	3953	HIS
2	A	3955	GLN
2	A	4009	ASN
2	A	4075	ASN
2	A	4579	HIS
2	A	4638	GLN
2	A	4936	GLN
1	E	95	ASN
1	F	95	ASN
1	G	95	ASN
2	D	604	HIS
2	D	608	HIS
2	D	651	HIS
2	D	692	HIS
2	D	903	GLN
2	D	932	ASN

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Mol	Chain	Res	Type
2	D	1005	ASN
2	D	1069	GLN
2	D	1233	GLN
2	D	1244	ASN
2	D	1562	ASN
2	D	1577	ASN
2	D	1836	ASN
2	D	1905	GLN
2	D	1974	ASN
2	D	2160	ASN
2	D	2540	HIS
2	D	2550	HIS
2	D	2565	GLN
2	D	2639	HIS
2	D	2700	ASN
2	D	2849	HIS
2	D	2937	HIS
2	D	2973	GLN
2	D	3031	ASN
2	D	3114	GLN
2	D	3115	HIS
2	D	3151	GLN
2	D	3318	HIS
2	D	3770	ASN
2	D	3775	GLN
2	D	3831	GLN
2	D	3869	ASN
2	D	3915	GLN
2	D	3953	HIS
2	D	3955	GLN
2	D	4009	ASN
2	D	4075	ASN
2	D	4579	HIS
2	D	4638	GLN
2	D	4933	HIS
2	D	4936	GLN
2	B	604	HIS
2	B	651	HIS
2	B	692	HIS
2	B	731	HIS
2	B	903	GLN
2	B	932	ASN

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Mol	Chain	Res	Type
2	B	1005	ASN
2	B	1069	GLN
2	B	1233	GLN
2	B	1562	ASN
2	B	1577	ASN
2	B	1905	GLN
2	B	1974	ASN
2	B	2160	ASN
2	B	2550	HIS
2	B	2565	GLN
2	B	2639	HIS
2	B	2700	ASN
2	B	2849	HIS
2	B	2937	HIS
2	B	2973	GLN
2	B	3031	ASN
2	B	3114	GLN
2	B	3115	HIS
2	B	3151	GLN
2	B	3230	GLN
2	B	3318	HIS
2	B	3770	ASN
2	B	3775	GLN
2	B	3831	GLN
2	B	3869	ASN
2	B	3915	GLN
2	B	3953	HIS
2	B	3955	GLN
2	B	4009	ASN
2	B	4075	ASN
2	B	4579	HIS
2	B	4879	GLN
2	B	4936	GLN
2	C	193	HIS
2	C	604	HIS
2	C	651	HIS
2	C	692	HIS
2	C	731	HIS
2	C	903	GLN
2	C	932	ASN
2	C	1005	ASN
2	C	1069	GLN

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Mol	Chain	Res	Type
2	C	1233	GLN
2	C	1244	ASN
2	C	1562	ASN
2	C	1577	ASN
2	C	1589	GLN
2	C	1836	ASN
2	C	1917	GLN
2	C	1974	ASN
2	C	2160	ASN
2	C	2291	ASN
2	C	2550	HIS
2	C	2565	GLN
2	C	2639	HIS
2	C	2700	ASN
2	C	2849	HIS
2	C	2937	HIS
2	C	2973	GLN
2	C	3031	ASN
2	C	3114	GLN
2	C	3115	HIS
2	C	3151	GLN
2	C	3230	GLN
2	C	3318	HIS
2	C	3770	ASN
2	C	3775	GLN
2	C	3831	GLN
2	C	3869	ASN
2	C	3915	GLN
2	C	3953	HIS
2	C	3955	GLN
2	C	4009	ASN
2	C	4075	ASN
2	C	4579	HIS
2	C	4638	GLN
2	C	4936	GLN

5.3.3 RNA ⓘ

There are no RNA molecules in this entry.

5.4 Non-standard residues in protein, DNA, RNA chains [i](#)

There are no non-standard protein/DNA/RNA residues in this entry.

5.5 Carbohydrates [i](#)

There are no oligosaccharides in this entry.

5.6 Ligand geometry [i](#)

Of 12 ligands modelled in this entry, 4 are monoatomic - leaving 8 for Mogul analysis.

In the following table, the Counts columns list the number of bonds (or angles) for which Mogul statistics could be retrieved, the number of bonds (or angles) that are observed in the model and the number of bonds (or angles) that are defined in the Chemical Component Dictionary. The Link column lists molecule types, if any, to which the group is linked. The Z score for a bond length (or angle) is the number of standard deviations the observed value is removed from the expected value. A bond length (or angle) with $|Z| > 2$ is considered an outlier worth inspection. RMSZ is the root-mean-square of all Z scores of the bond lengths (or angles).

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\# Z > 2$	Counts	RMSZ	$\# Z > 2$
5	ATP	D	5003	-	32,33,33	0.27	0	48,52,52	0.27	0
5	ATP	A	5003	-	32,33,33	0.27	0	48,52,52	0.27	0
5	ATP	B	5003	-	32,33,33	0.27	0	48,52,52	0.27	0
5	ATP	C	5003	-	32,33,33	0.26	0	48,52,52	0.27	0
5	ATP	A	5002	-	32,33,33	0.28	0	48,52,52	0.35	0
5	ATP	D	5002	-	32,33,33	0.27	0	48,52,52	0.35	0
5	ATP	C	5002	-	32,33,33	0.28	0	48,52,52	0.35	0
5	ATP	B	5002	-	32,33,33	0.28	0	48,52,52	0.35	0

In the following table, the Chirals column lists the number of chiral outliers, the number of chiral centers analysed, the number of these observed in the model and the number defined in the Chemical Component Dictionary. Similar counts are reported in the Torsion and Rings columns. '-' means no outliers of that kind were identified.

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
5	ATP	D	5003	-	-	9/22/38/38	0/3/3/3
5	ATP	A	5003	-	-	9/22/38/38	0/3/3/3
5	ATP	B	5003	-	-	9/22/38/38	0/3/3/3
5	ATP	C	5003	-	-	9/22/38/38	0/3/3/3
5	ATP	A	5002	-	-	12/22/38/38	0/3/3/3
5	ATP	D	5002	-	-	12/22/38/38	0/3/3/3

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
5	ATP	C	5002	-	-	12/22/38/38	0/3/3/3
5	ATP	B	5002	-	-	12/22/38/38	0/3/3/3

There are no bond length outliers.

There are no bond angle outliers.

There are no chirality outliers.

All (84) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
5	A	5002	ATP	PB-O3B-PG-O3G
5	A	5002	ATP	C5'-O5'-PA-O1A
5	A	5002	ATP	C5'-O5'-PA-O2A
5	A	5002	ATP	C5'-O5'-PA-O3A
5	A	5002	ATP	O4'-C4'-C5'-O5'
5	A	5003	ATP	C5'-O5'-PA-O1A
5	A	5003	ATP	C5'-O5'-PA-O2A
5	A	5003	ATP	C5'-O5'-PA-O3A
5	D	5002	ATP	PB-O3B-PG-O3G
5	D	5002	ATP	C5'-O5'-PA-O1A
5	D	5002	ATP	C5'-O5'-PA-O2A
5	D	5002	ATP	C5'-O5'-PA-O3A
5	D	5002	ATP	O4'-C4'-C5'-O5'
5	D	5003	ATP	C5'-O5'-PA-O1A
5	D	5003	ATP	C5'-O5'-PA-O2A
5	D	5003	ATP	C5'-O5'-PA-O3A
5	B	5002	ATP	PB-O3B-PG-O3G
5	B	5002	ATP	C5'-O5'-PA-O1A
5	B	5002	ATP	C5'-O5'-PA-O2A
5	B	5002	ATP	C5'-O5'-PA-O3A
5	B	5002	ATP	O4'-C4'-C5'-O5'
5	B	5003	ATP	C5'-O5'-PA-O1A
5	B	5003	ATP	C5'-O5'-PA-O2A
5	B	5003	ATP	C5'-O5'-PA-O3A
5	C	5002	ATP	PB-O3B-PG-O3G
5	C	5002	ATP	C5'-O5'-PA-O1A
5	C	5002	ATP	C5'-O5'-PA-O2A
5	C	5002	ATP	C5'-O5'-PA-O3A
5	C	5002	ATP	O4'-C4'-C5'-O5'
5	C	5003	ATP	C5'-O5'-PA-O1A
5	C	5003	ATP	C5'-O5'-PA-O2A

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Mol	Chain	Res	Type	Atoms
5	C	5003	ATP	C5'-O5'-PA-O3A
5	A	5002	ATP	C3'-C4'-C5'-O5'
5	D	5002	ATP	C3'-C4'-C5'-O5'
5	B	5002	ATP	C3'-C4'-C5'-O5'
5	C	5002	ATP	C3'-C4'-C5'-O5'
5	A	5003	ATP	O4'-C4'-C5'-O5'
5	D	5003	ATP	O4'-C4'-C5'-O5'
5	B	5003	ATP	O4'-C4'-C5'-O5'
5	C	5003	ATP	O4'-C4'-C5'-O5'
5	A	5003	ATP	C3'-C4'-C5'-O5'
5	D	5003	ATP	C3'-C4'-C5'-O5'
5	B	5003	ATP	C3'-C4'-C5'-O5'
5	C	5003	ATP	C3'-C4'-C5'-O5'
5	A	5003	ATP	PG-O3B-PB-O1B
5	D	5003	ATP	PG-O3B-PB-O1B
5	B	5003	ATP	PG-O3B-PB-O1B
5	C	5003	ATP	PG-O3B-PB-O1B
5	A	5002	ATP	PA-O3A-PB-O1B
5	D	5002	ATP	PA-O3A-PB-O1B
5	B	5002	ATP	PA-O3A-PB-O1B
5	C	5002	ATP	PA-O3A-PB-O1B
5	A	5002	ATP	PG-O3B-PB-O3A
5	D	5002	ATP	PG-O3B-PB-O3A
5	B	5002	ATP	PG-O3B-PB-O3A
5	C	5002	ATP	PG-O3B-PB-O3A
5	A	5002	ATP	PG-O3B-PB-O1B
5	A	5003	ATP	PA-O3A-PB-O2B
5	A	5003	ATP	PB-O3A-PA-O1A
5	A	5003	ATP	PB-O3A-PA-O2A
5	D	5002	ATP	PG-O3B-PB-O1B
5	D	5003	ATP	PA-O3A-PB-O2B
5	D	5003	ATP	PB-O3A-PA-O1A
5	D	5003	ATP	PB-O3A-PA-O2A
5	B	5002	ATP	PG-O3B-PB-O1B
5	B	5003	ATP	PA-O3A-PB-O2B
5	B	5003	ATP	PB-O3A-PA-O1A
5	B	5003	ATP	PB-O3A-PA-O2A
5	C	5002	ATP	PG-O3B-PB-O1B
5	C	5003	ATP	PA-O3A-PB-O2B
5	C	5003	ATP	PB-O3A-PA-O1A
5	C	5003	ATP	PB-O3A-PA-O2A
5	A	5002	ATP	O4'-C1'-N9-C8

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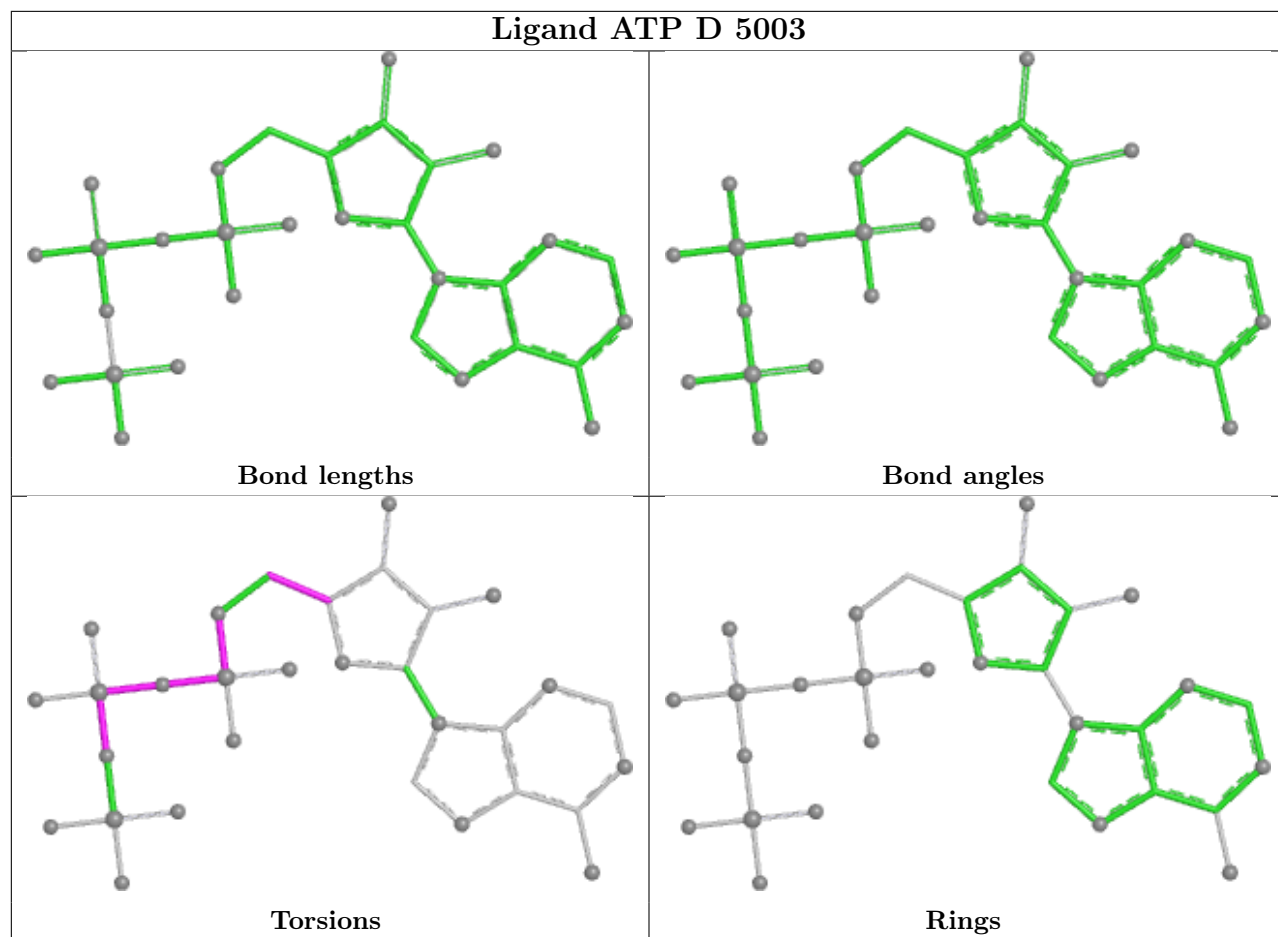
Continued from previous page...

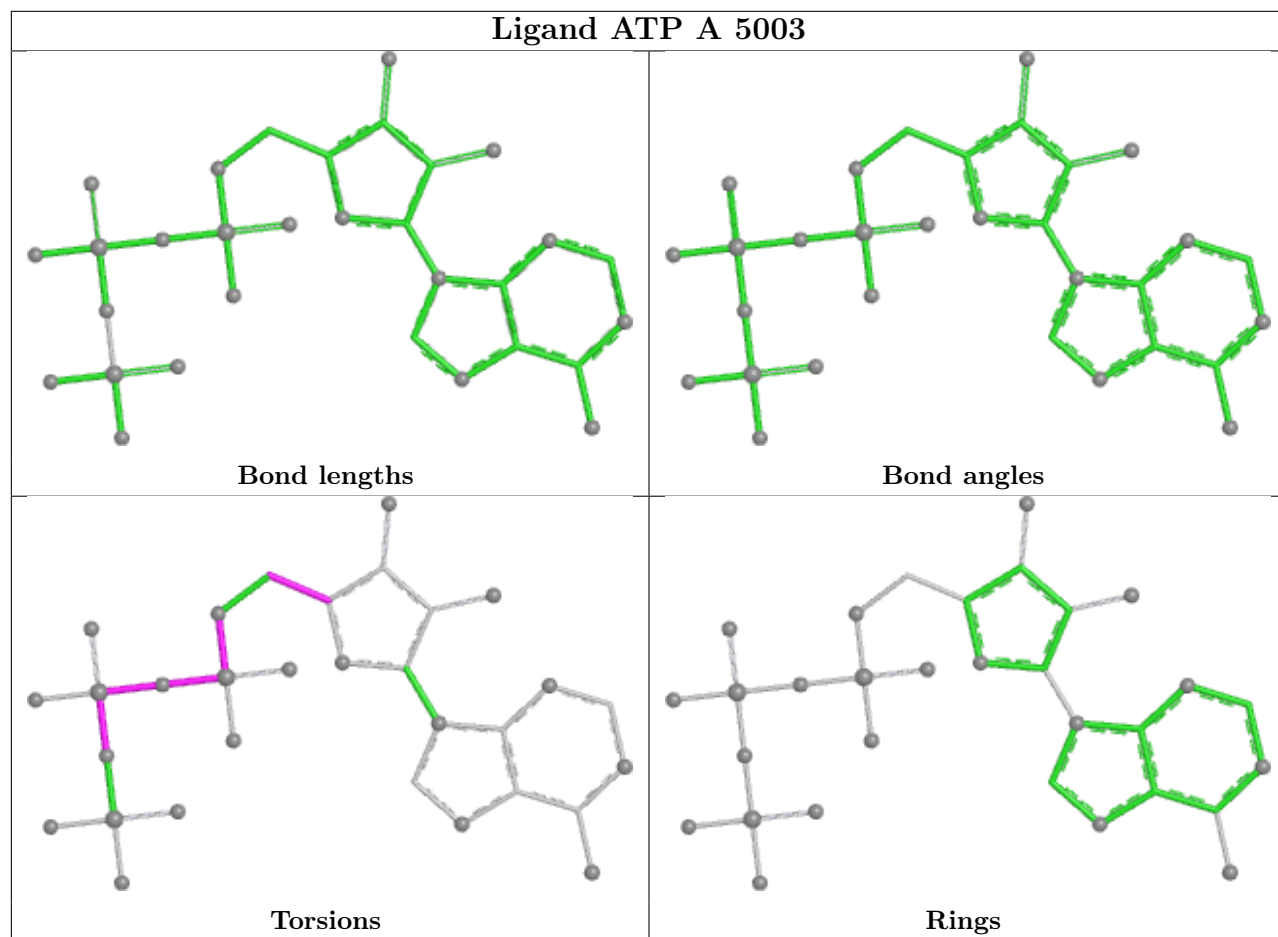
Mol	Chain	Res	Type	Atoms
5	D	5002	ATP	O4'-C1'-N9-C8
5	B	5002	ATP	O4'-C1'-N9-C8
5	C	5002	ATP	O4'-C1'-N9-C8
5	A	5002	ATP	PG-O3B-PB-O2B
5	A	5002	ATP	PA-O3A-PB-O2B
5	D	5002	ATP	PG-O3B-PB-O2B
5	D	5002	ATP	PA-O3A-PB-O2B
5	B	5002	ATP	PG-O3B-PB-O2B
5	B	5002	ATP	PA-O3A-PB-O2B
5	C	5002	ATP	PG-O3B-PB-O2B
5	C	5002	ATP	PA-O3A-PB-O2B

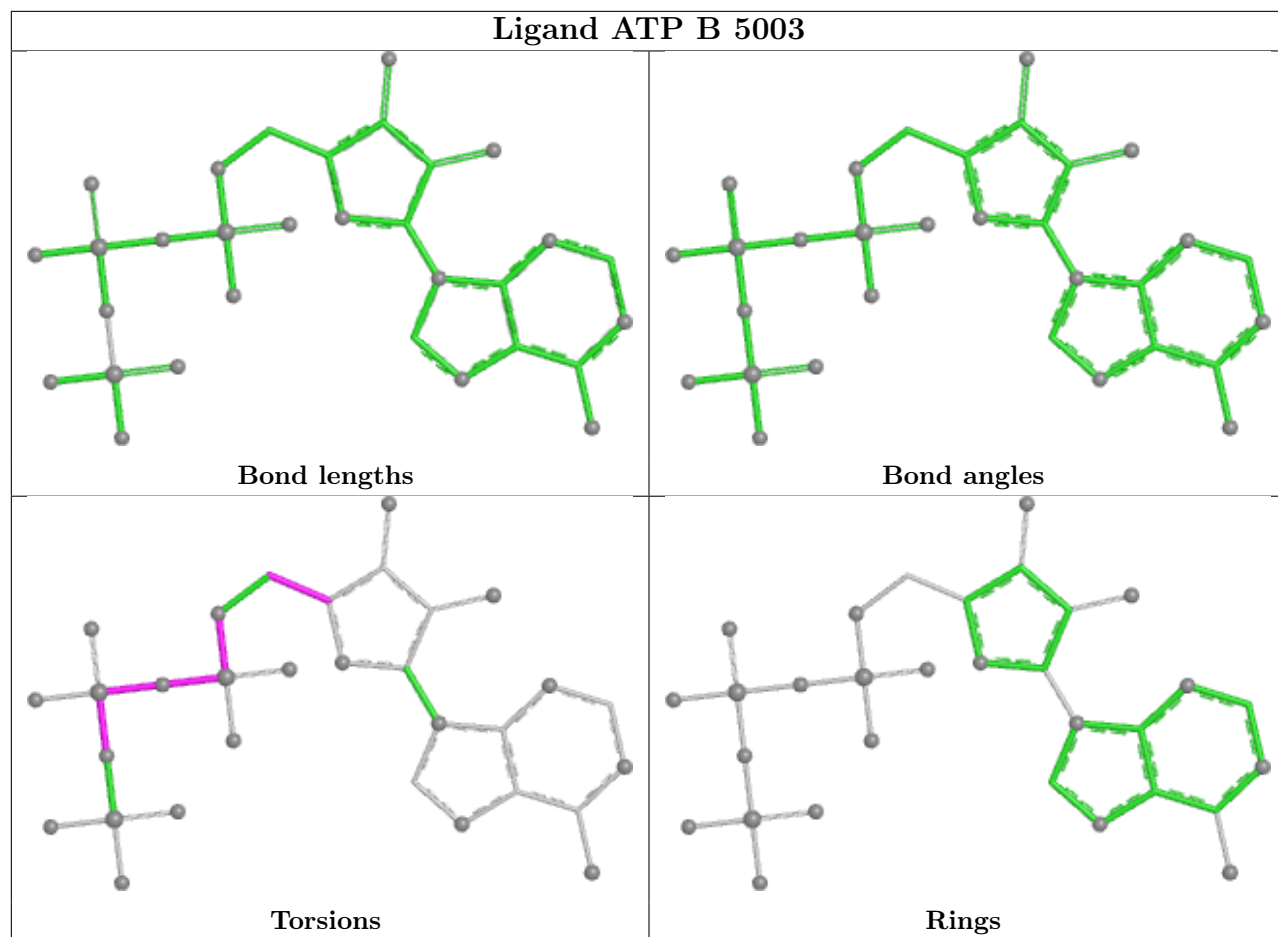
There are no ring outliers.

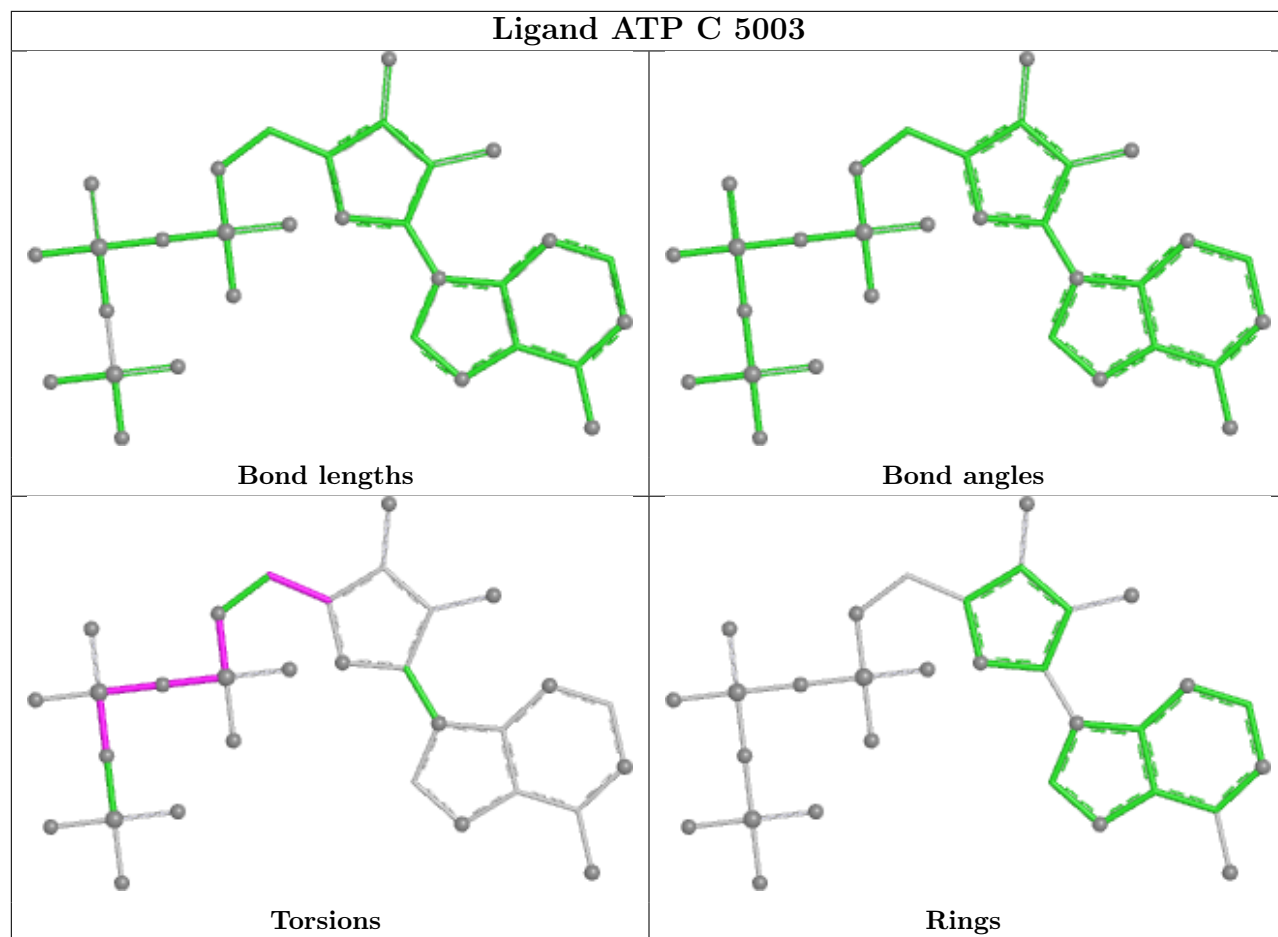
No monomer is involved in short contacts.

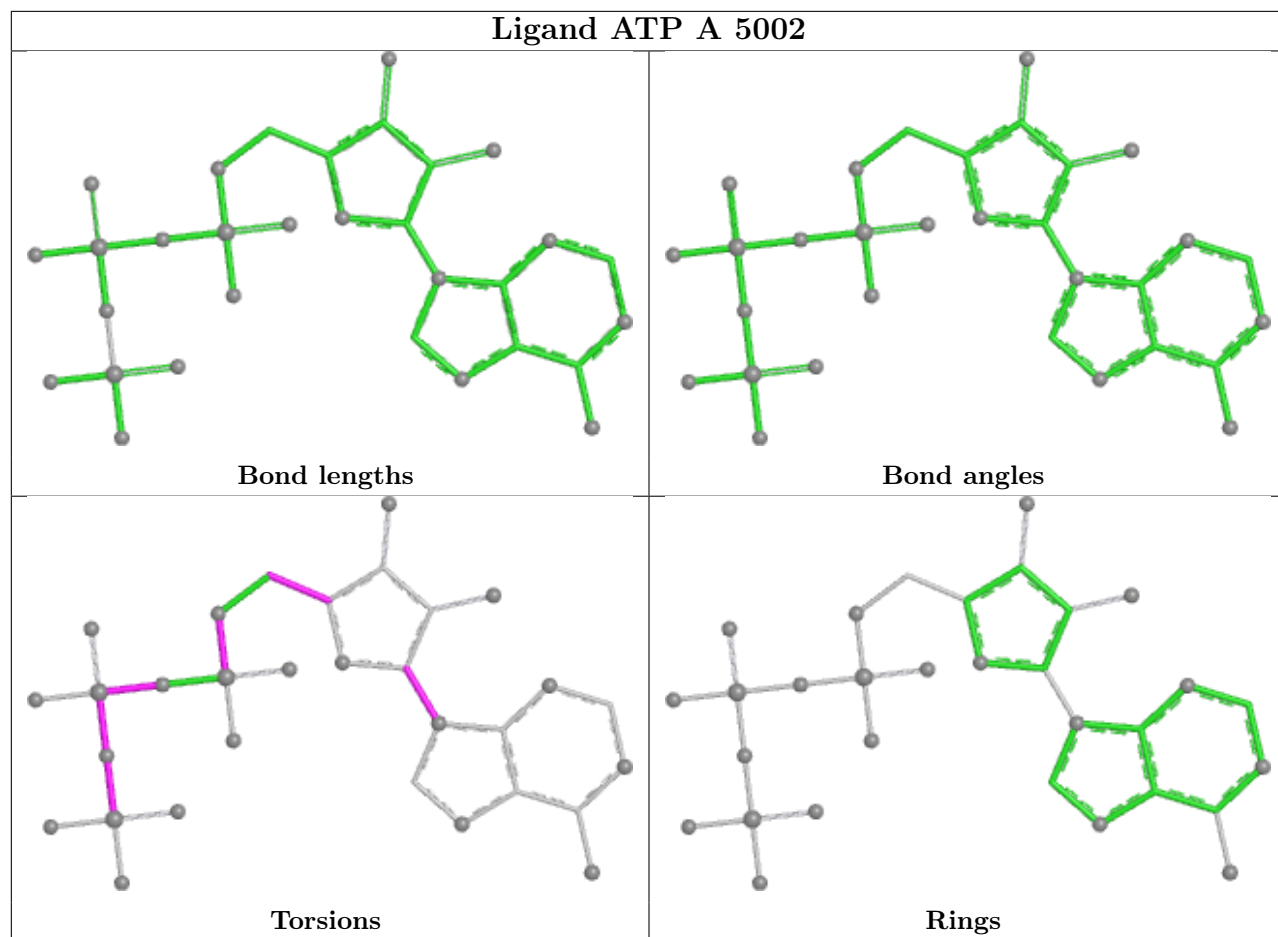
The following is a two-dimensional graphical depiction of Mogul quality analysis of bond lengths, bond angles, torsion angles, and ring geometry for all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the validation Tables will also be included. For torsion angles, if less than 5% of the Mogul distribution of torsion angles is within 10 degrees of the torsion angle in question, then that torsion angle is considered an outlier. Any bond that is central to one or more torsion angles identified as an outlier by Mogul will be highlighted in the graph. For rings, the root-mean-square deviation (RMSD) between the ring in question and similar rings identified by Mogul is calculated over all ring torsion angles. If the average RMSD is greater than 60 degrees and the minimal RMSD between the ring in question and any Mogul-identified rings is also greater than 60 degrees, then that ring is considered an outlier. The outliers are highlighted in purple. The color gray indicates Mogul did not find sufficient equivalents in the CSD to analyse the geometry.

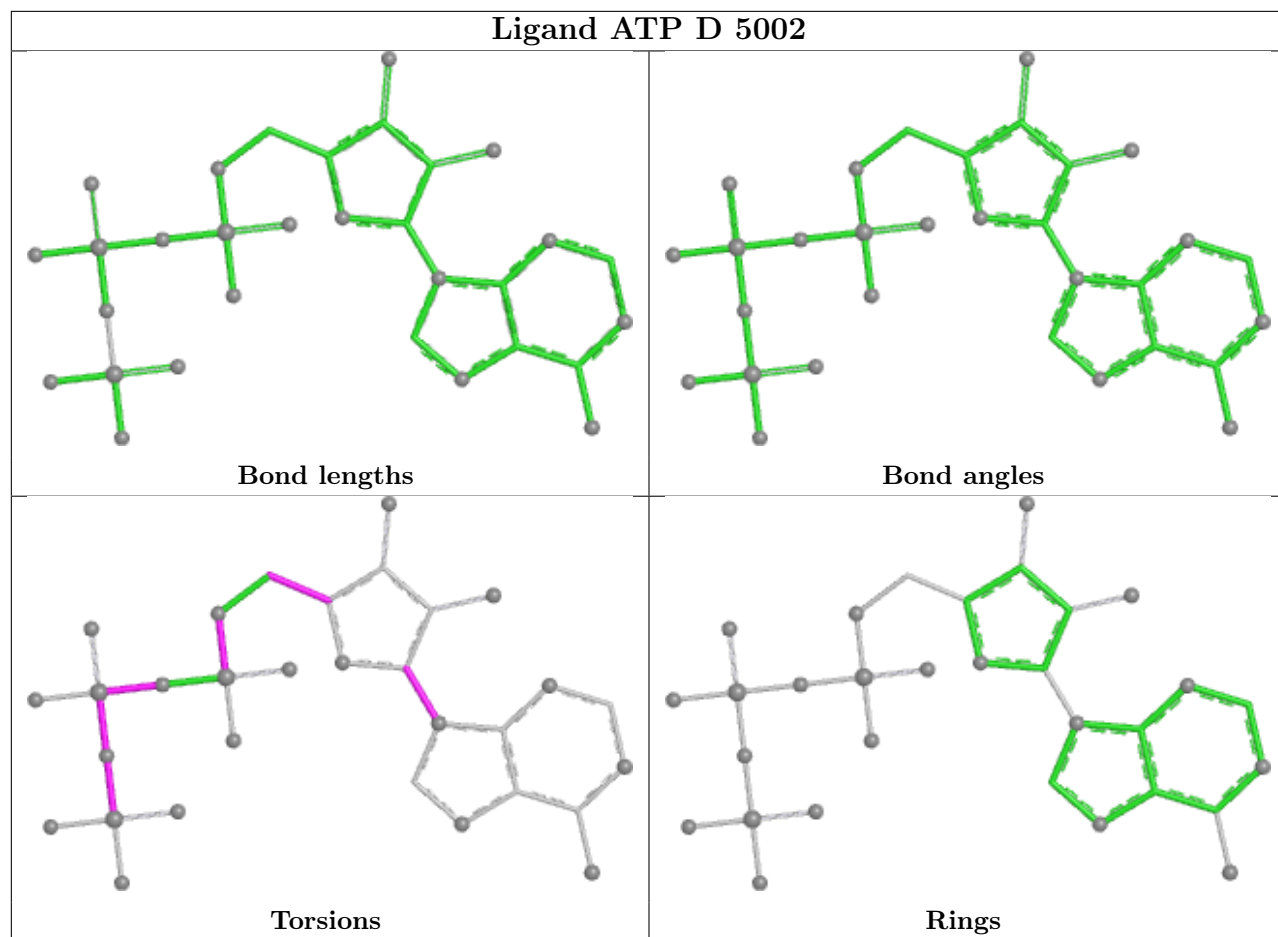


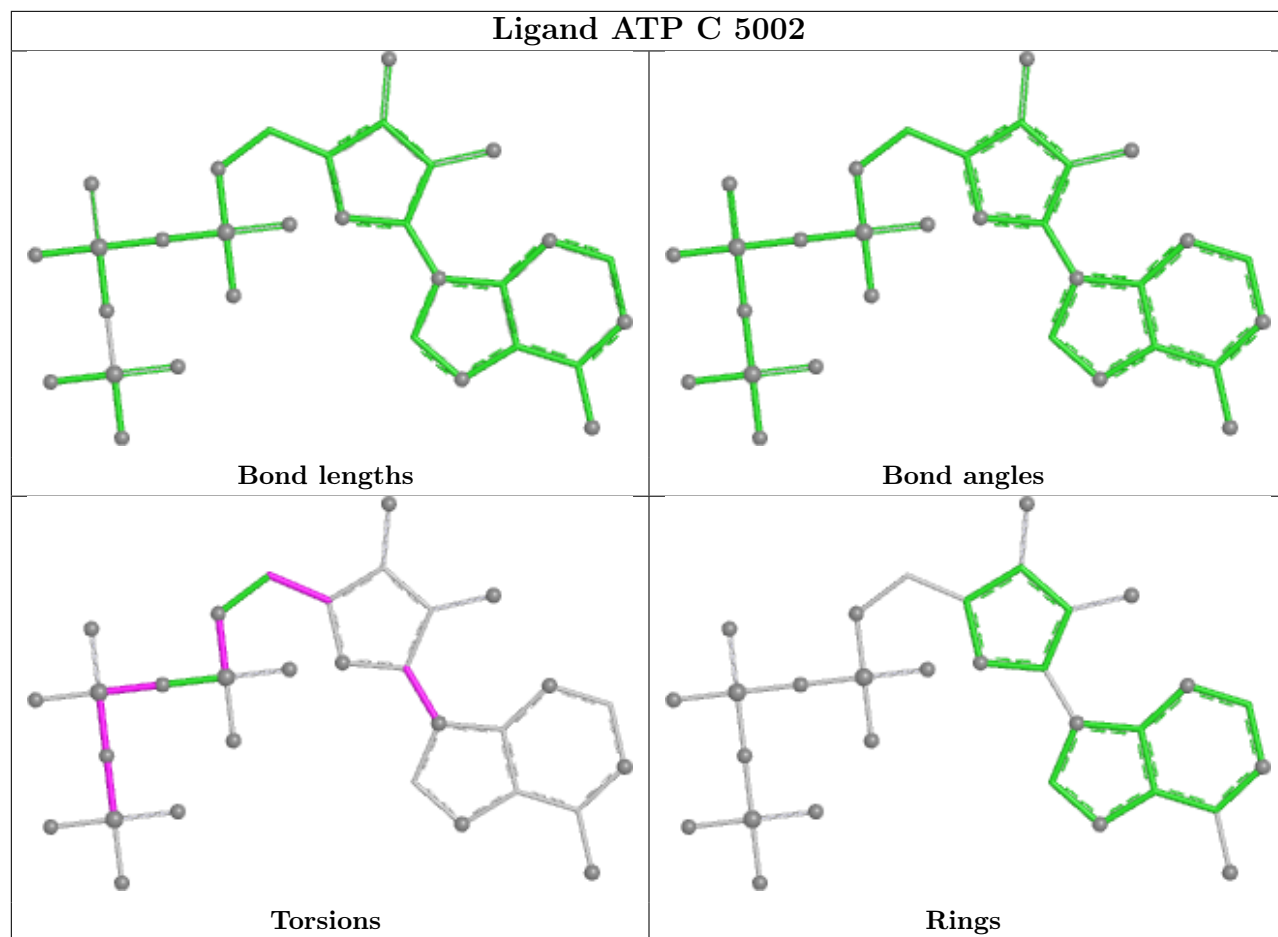


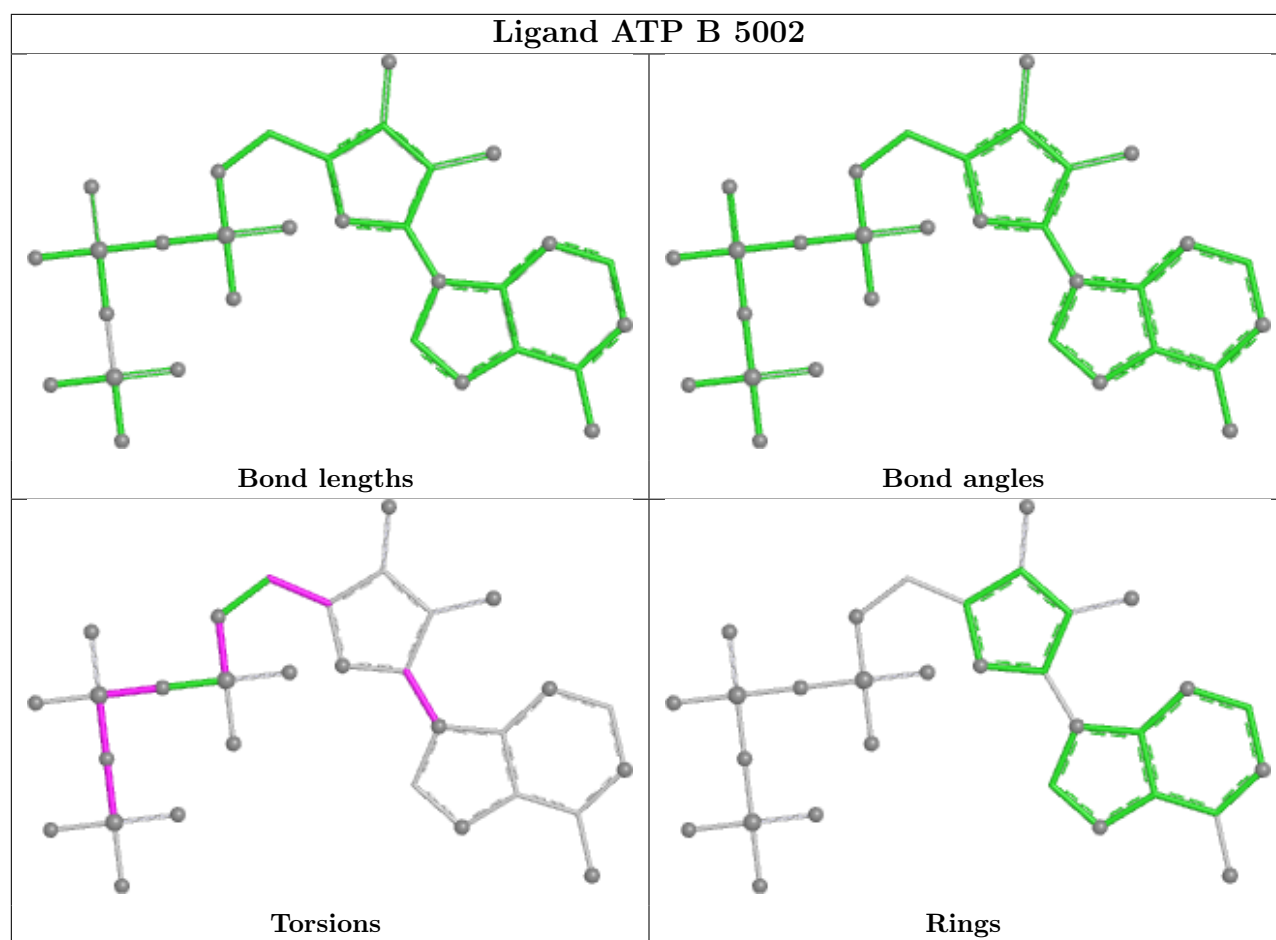












5.7 Other polymers [i](#)

There are no such residues in this entry.

5.8 Polymer linkage issues [i](#)

There are no chain breaks in this entry.

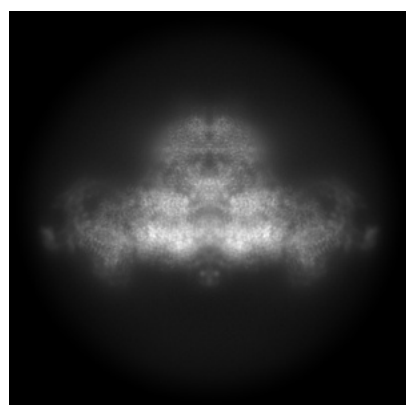
6 Map visualisation [i](#)

This section contains visualisations of the EMDB entry EMD-26408. These allow visual inspection of the internal detail of the map and identification of artifacts.

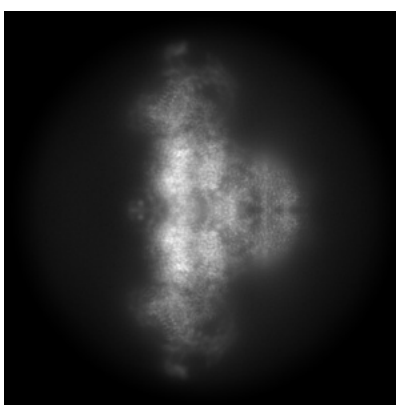
No raw map or half-maps were deposited for this entry and therefore no images, graphs, etc. pertaining to the raw map can be shown.

6.1 Orthogonal projections [i](#)

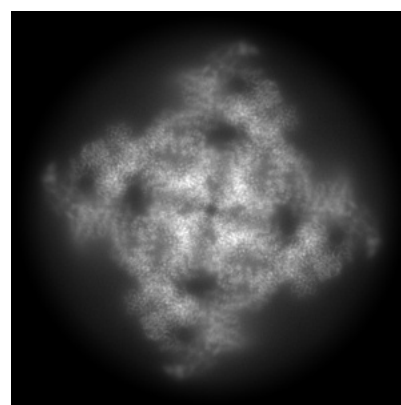
6.1.1 Primary map



X



Y

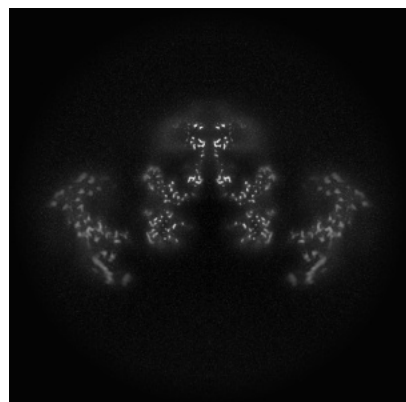


Z

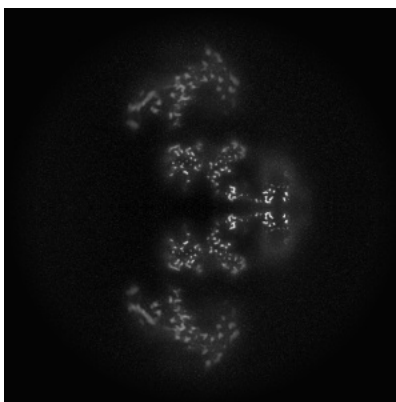
The images above show the map projected in three orthogonal directions.

6.2 Central slices [i](#)

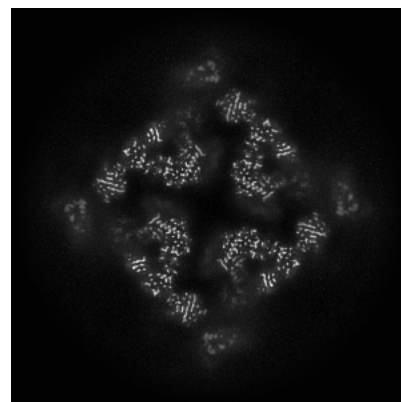
6.2.1 Primary map



X Index: 256



Y Index: 256

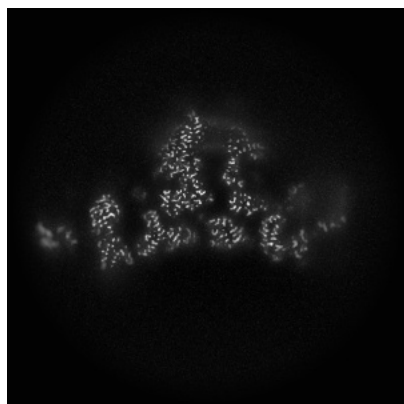


Z Index: 256

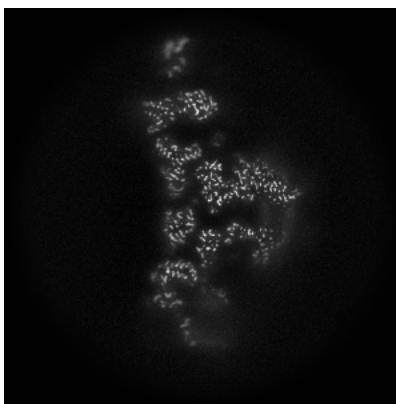
The images above show central slices of the map in three orthogonal directions.

6.3 Largest variance slices [i](#)

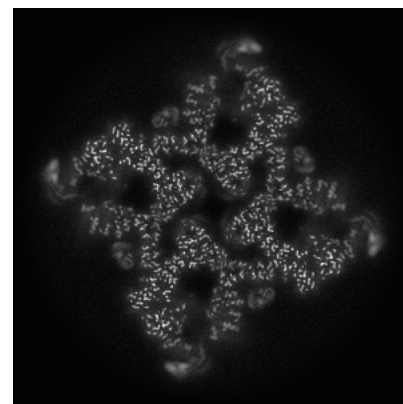
6.3.1 Primary map



X Index: 220



Y Index: 220

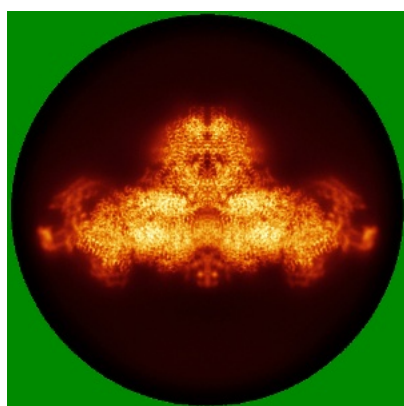


Z Index: 223

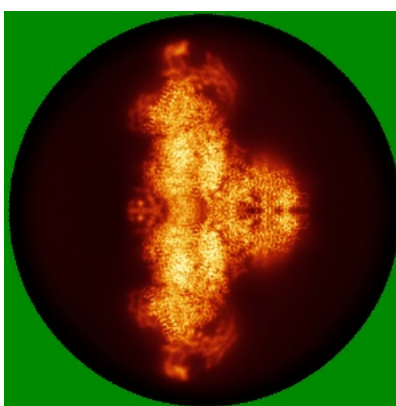
The images above show the largest variance slices of the map in three orthogonal directions.

6.4 Orthogonal standard-deviation projections (False-color) [i](#)

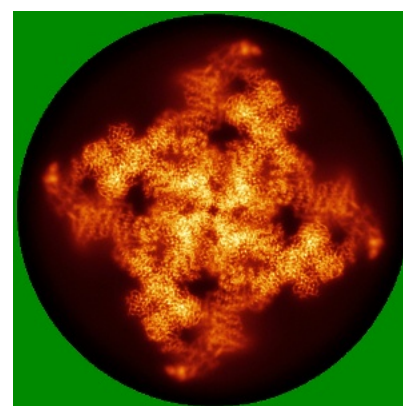
6.4.1 Primary map



X



Y

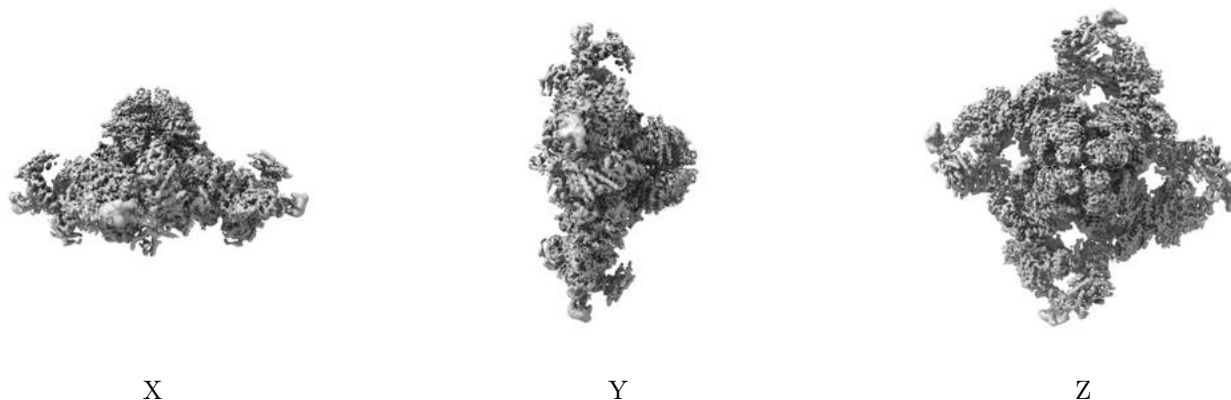


Z

The images above show the map standard deviation projections with false color in three orthogonal directions. Minimum values are shown in green, max in blue, and dark to light orange shades represent small to large values respectively.

6.5 Orthogonal surface views [i](#)

6.5.1 Primary map



The images above show the 3D surface view of the map at the recommended contour level 0.14. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

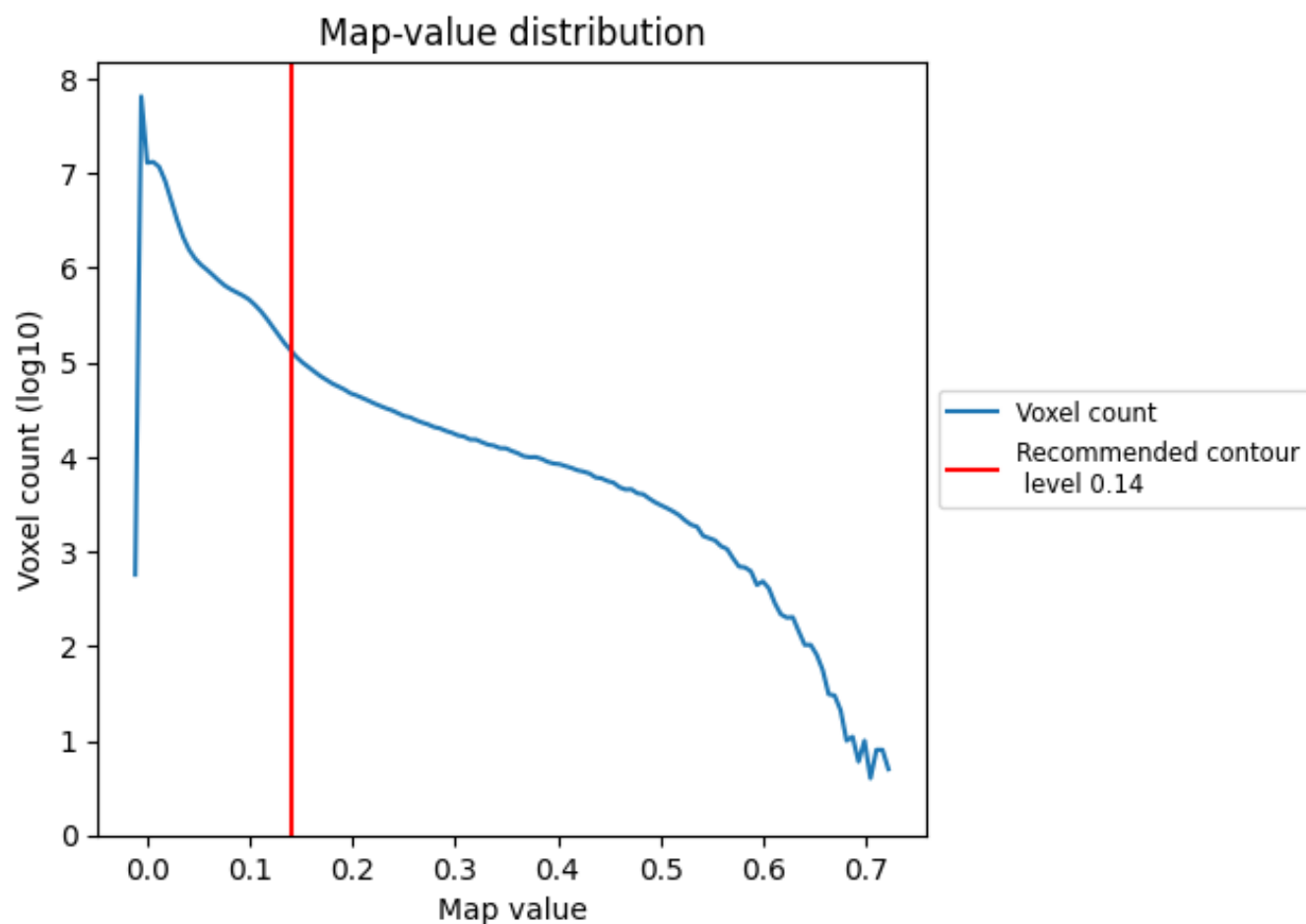
6.6 Mask visualisation [i](#)

This section was not generated. No masks/segmentation were deposited.

7 Map analysis [i](#)

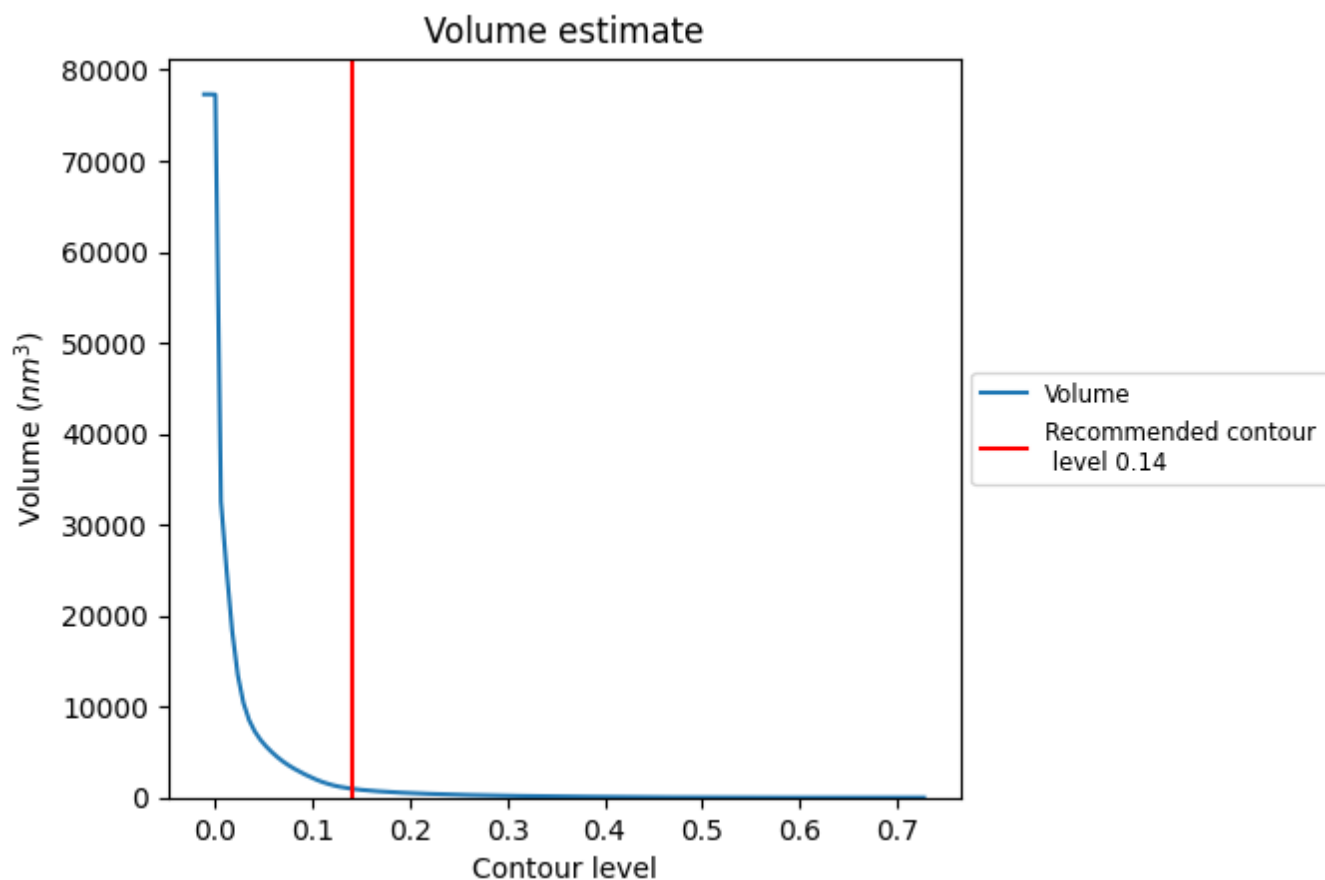
This section contains the results of statistical analysis of the map.

7.1 Map-value distribution [i](#)



The map-value distribution is plotted in 128 intervals along the x-axis. The y-axis is logarithmic. A spike in this graph at zero usually indicates that the volume has been masked.

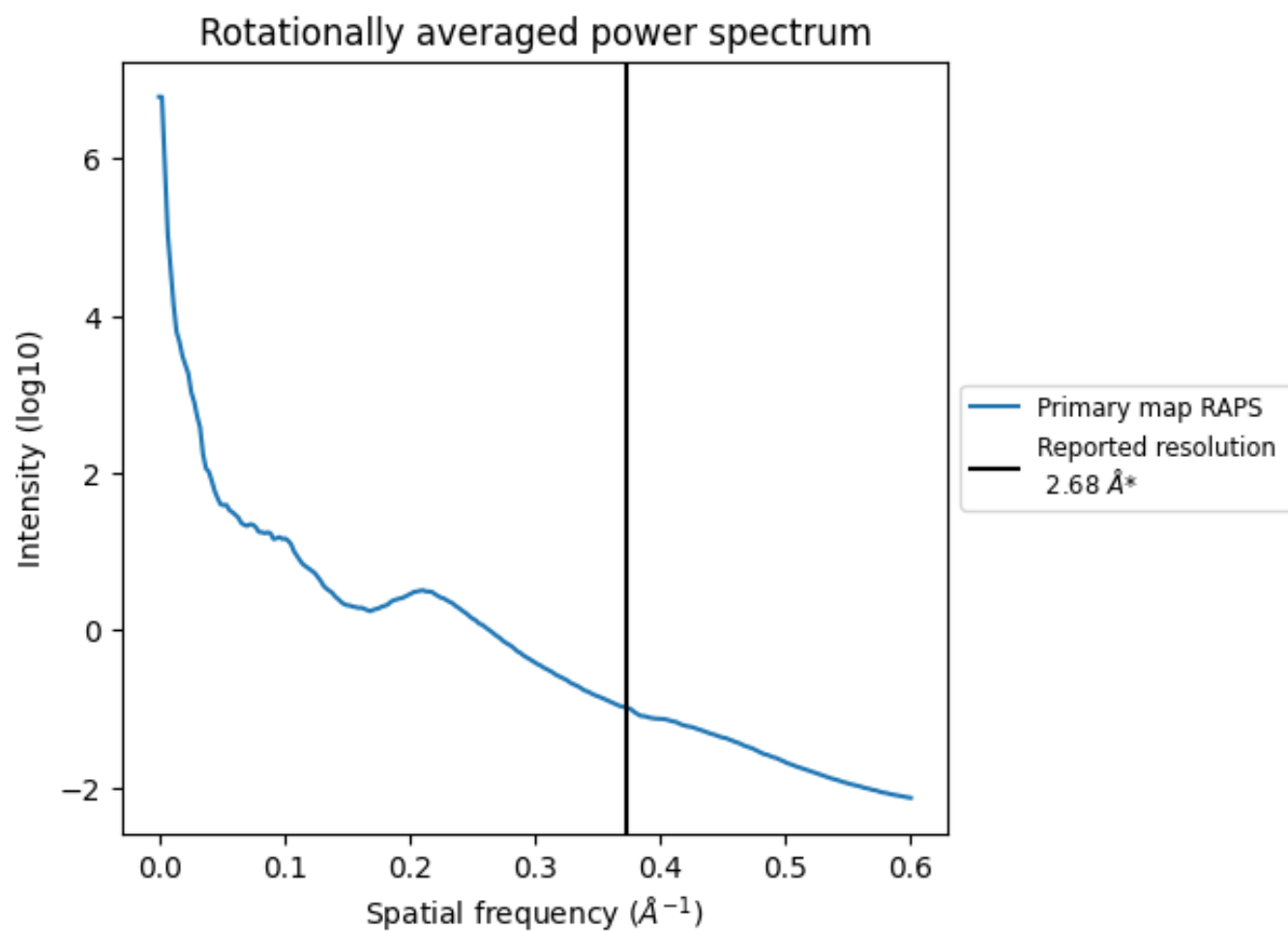
7.2 Volume estimate [i](#)



The volume at the recommended contour level is 973 nm³; this corresponds to an approximate mass of 879 kDa.

The volume estimate graph shows how the enclosed volume varies with the contour level. The recommended contour level is shown as a vertical line and the intersection between the line and the curve gives the volume of the enclosed surface at the given level.

7.3 Rotationally averaged power spectrum ⓘ



*Reported resolution corresponds to spatial frequency of 0.373 Å⁻¹

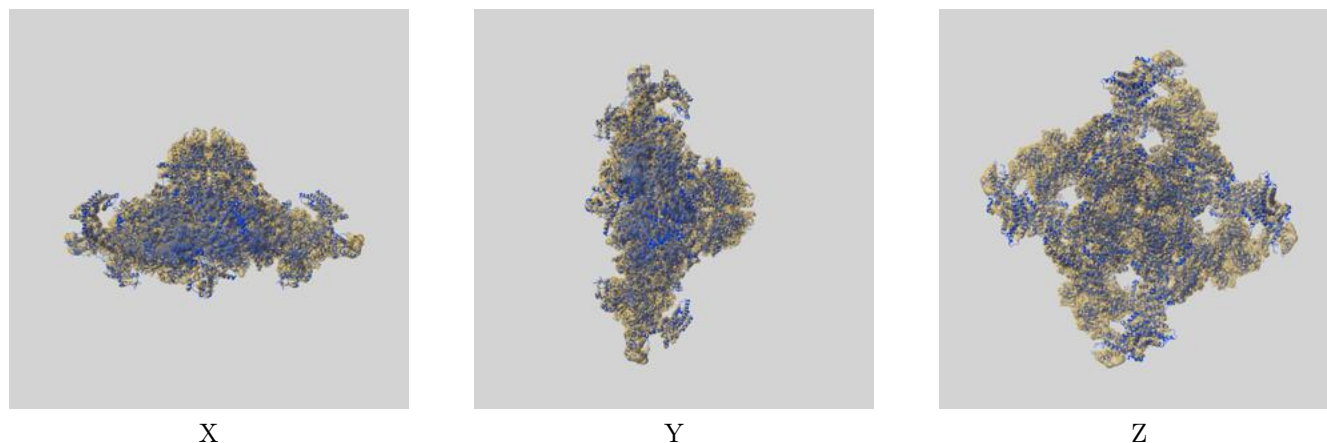
8 Fourier-Shell correlation

This section was not generated. No FSC curve or half-maps provided.

9 Map-model fit [i](#)

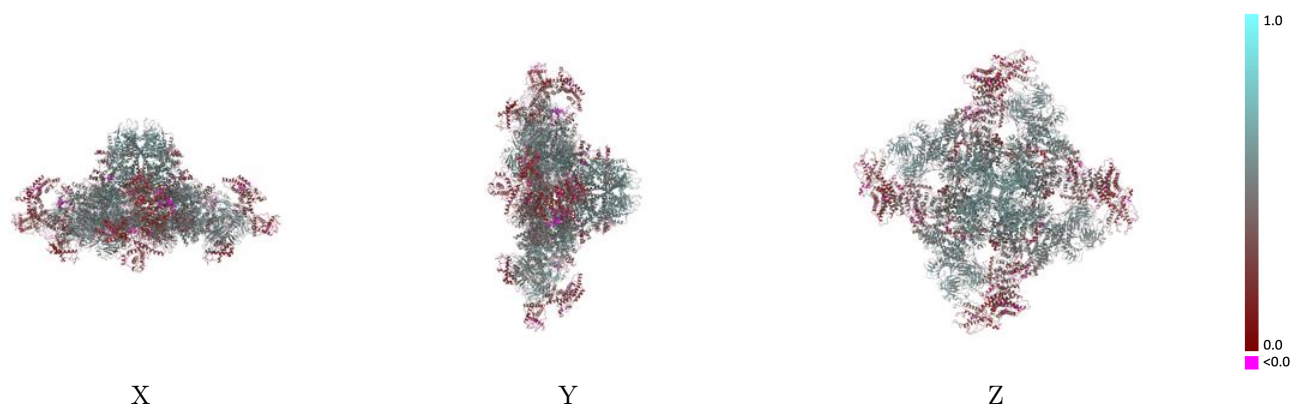
This section contains information regarding the fit between EMDB map EMD-26408 and PDB model 7U9T. Per-residue inclusion information can be found in section [3](#) on page [7](#).

9.1 Map-model overlay [i](#)



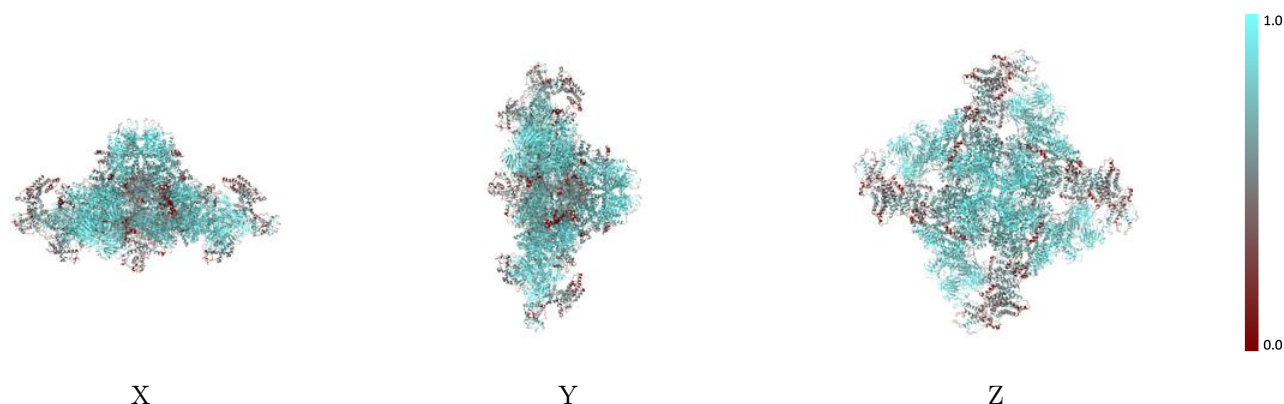
The images above show the 3D surface view of the map at the recommended contour level 0.14 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

9.2 Q-score mapped to coordinate model [i](#)



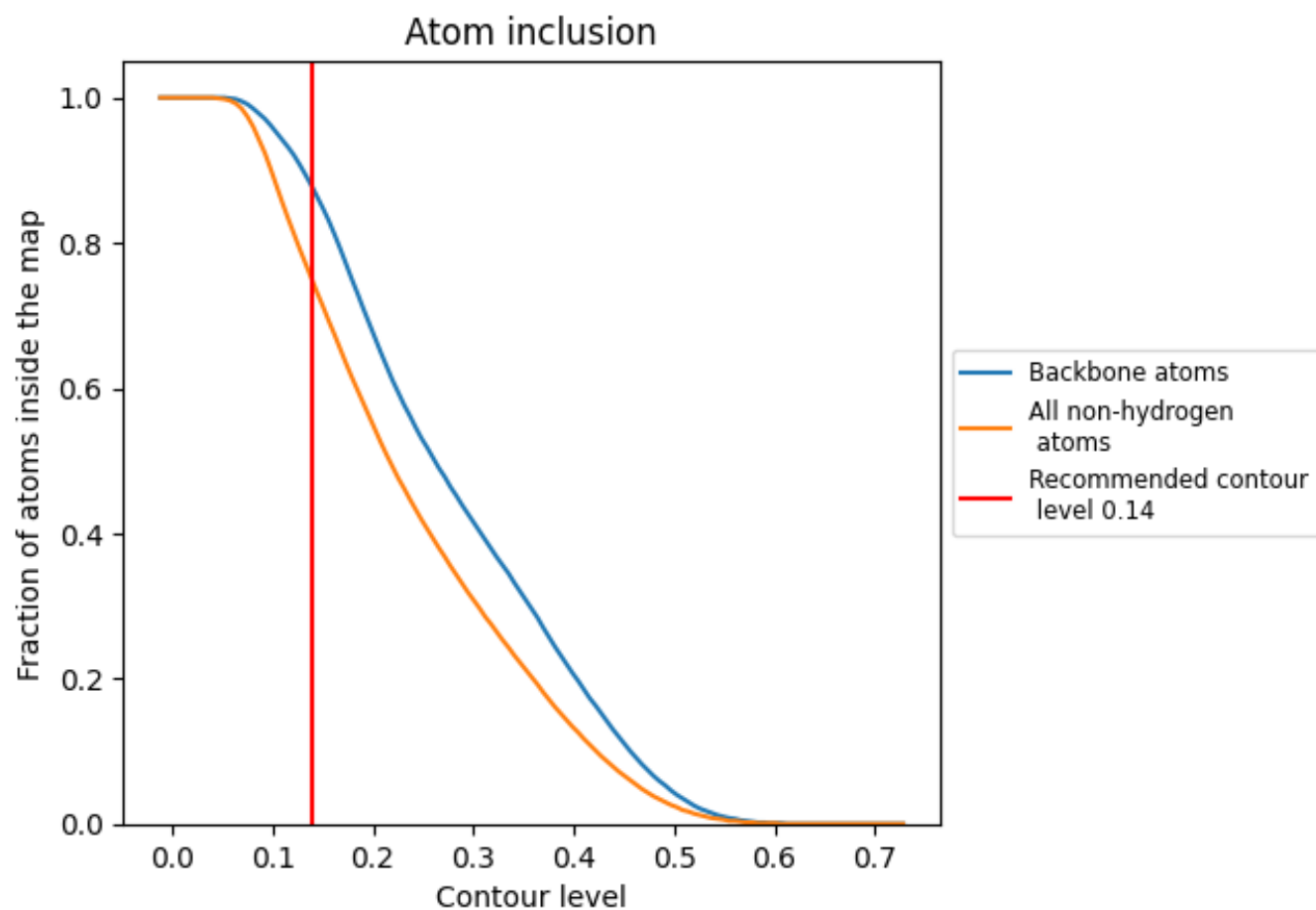
The images above show the model with each residue coloured according to its Q-score. This shows their resolvability in the map with higher Q-score values reflecting better resolvability. Please note: Q-score is calculating the resolvability of atoms, and thus high values are only expected at resolutions at which atoms can be resolved. Low Q-score values may therefore be expected for many entries.

9.3 Atom inclusion mapped to coordinate model [i](#)



The images above show the model with each residue coloured according to its atom inclusion. This shows to what extent they are inside the map at the recommended contour level (0.14).

9.4 Atom inclusion [i](#)



At the recommended contour level, 88% of all backbone atoms, 75% of all non-hydrogen atoms, are inside the map.

9.5 Map-model fit summary ⓘ

The table lists the average atom inclusion at the recommended contour level (0.14) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	0.7470	0.4270
A	0.7580	0.4290
B	0.7570	0.4370
C	0.7560	0.4270
D	0.7570	0.4350
E	0.8940	0.5320
F	0.8900	0.5210
G	0.9020	0.5370
H	0.9130	0.5530
I	0.3320	0.1940
J	0.3090	0.1570
K	0.3330	0.1800
L	0.3360	0.1990

1.0

0.0

<0.0